2025 | Climate Risk and Resilience Report

Prepared in accordance with the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations

Pattern

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Introduction

Pattern Energy Group LP (Pattern Energy or Pattern) is one of the world's leading privately owned developers and operators of clean energy and transmission infrastructure. Pattern develops, constructs, owns, and operates utility-scale wind, solar, transmission, and energy storage projects across North America.

Pattern's clean energy generation facilities deliver reliable, affordable power sold under long-term contracts with utilities, municipalities, commercial and industrial users, and other load-serving entities, ultimately serving millions of customers each year. Our distributed generation affiliates, Select Energy and Dynamic Energy, develop, construct, and operate commercial and community solar projects in the U.S.

This Climate Risk and Resilience Report presents the results of Pattern's 2025 enterprise climate risk assessment, conducted in alignment with the eleven recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). The assessment primarily focuses on climate-related risks and opportunities for Pattern, reflecting our emphasis on identifying and evaluating our most material climate-related financial risk exposures. Unless otherwise noted, the analysis and practices presented in this report apply to our utility-scale North American operations and assets.

We also evaluated climate-related risks and opportunities for our U.S. distributed generation affiliates, Select Energy and Dynamic Energy, through stakeholder interviews and highlighted key insights in callout boxes within the report.

The assessment provides a qualitative evaluation of climate-related risks and opportunities and addresses all four TCFD pillars: governance, strategy, risk management, and metrics and targets. Pattern's enterprise-level climate risk assessment complements ongoing activities within our Enterprise Risk Management (ERM) program and project development due diligence processes.

Looking ahead, we plan to deepen our analysis by applying more quantitative methods to evaluate material risks and opportunities, particularly as tools for assessing transition risk continue to mature.

We are also advancing our physical risk assessments by leveraging climate analytics platforms alongside internal and external subject matter expertise. We continue to assess potential metrics and key performance indicators (KPIs) to enhance how we monitor climate risk exposure, measure progress, and guide strategic decision-making.

Governance

Strong governance is central to how we identify, assess, and manage climate-related risks and opportunities. Oversight begins at the Board of Directors level. We integrate climate risk into our broader ERM framework, which the Board's Audit Committee oversees.

Our Executive Team embeds climate considerations into day-to-day decision-making, risk monitoring, and long-term strategy across teams. This governance structure enables accountability, transparent reporting, and proactive management of both physical and transition risks and opportunities across our portfolio.

Board Oversight of Climate-Related Risks and Opportunities

Pattern's ERM program provides a structured approach to identifying, assessing, and mitigating corporate risks, including climate-related risks.

Both the Audit Committee and the full Board review Pattern's top ten corporate risks every quarter. The Audit Committee evaluates climate-related risks and opportunities as part of its broader oversight of enterprise risks and reports key findings to the full Board.

The Board also receives periodic briefings from management on climate and sustainability topics, including regulatory developments, physical climate risks, and market opportunities. Strategic discussions, such as those relating to capital allocation, investment decisions, and long-term business planning, may take climate-related factors into account.

Management Role in Assessing and Managing Climate-Related Risks and Opportunities

Our Corporate Risk Register encompasses both enterprise and project-level risks with designated risk owners and Executive Leadership oversight. Each risk includes a severity assessment and mitigation plan.

Climate-related hazards, including extreme weather events and chronic shifts in weather patterns, are classified as enterprise risks in the Corporate Risk Register.

The Executive Leadership Team, led by our Chief Executive Officer (CEO), receives monthly updates from risk owners on risks, mitigation plans, compliance, and progress on risk management activities. In addition, cross-functional teams, including Finance, Development, Operations, Sustainability, and ERM, play a key role in identifying emerging risks through standard business and project development processes.

Updates on risk management activities are shared with the Board's Audit Committee quarterly to maintain alignment between operational practices and strategic oversight.

Strategy

Climate change presents both risks and opportunities for our business over the short, medium, and long term. Measuring and managing these factors is essential to the long-term success of our company and assets.

We work to understand how a changing climate impacts energy infrastructure, communities, and energy resilience, enabling proactive and informed planning and response. We embed climate considerations into how we plan, site, design, and operate our fleet.

Our operational facilities actively support decarbonization of the power sector, positioning Pattern to benefit from growing demand for renewable energy from utilities, corporate buyers, and public policy. At the same time, our performance is inherently tied to weather and climate variability. Shifting weather patterns and extreme events can affect the consistency of energy delivery and create potential impacts on project schedules and financial performance.

This report outlines our approach to assessing climate-related risks and opportunities at the corporate level. Additionally, each project undergoes a rigorous stage-gating process from development through construction and operations. Project advancement through stage-gates requires meeting defined milestones, including assessing the physical risks posed by climate change. We prepare Climate Change Risk Assessments (CCRAs) in line with TCFD guidance and the Equator Principles, a risk-management framework used by financial institutions to assess and manage environmental and social risks in project finance.

Led by our Meteorology and GIS Team in collaboration with the Sustainability Team, the process involves identifying site-specific hazards, such as flooding, hail, extreme winds, and wildfire, assessing potential impacts by technology type, and evaluating likelihood and severity under two climate scenarios (International Panel on Climate Change (IPCC) SSP2-4.5 and SSP5-8.5[1]). Together with subject matter experts (SMEs), we document project mitigation measures that address and reduce exposure to these risks.

Climate-Related Risks and Opportunities

For the company's enterprise-level 2025 climate risk assessment, Pattern identified climate-related risks and opportunities through a multi-step process that combined external insights with internal expertise, as shown in Figure 1.

We first used market research and peer benchmarking to define the external risk landscape. The Sustainability Team then conducted one-on-one interviews with SMEs across departments to discuss TCFD-defined transition and physical risks, along with related opportunities, as summarized in Figure 2.

In addition, we consulted leaders from our distributed generation affiliates, Select Energy and Dynamic Energy, to identify significant risks and opportunities specific to those businesses. The Sustainability Team also reviewed Pattern's Corporate Risk Register to capture further insights on risks, priorities, and mitigation measures.

We mapped findings from these interviews to TCFD risk categories and qualitatively assessed across three time horizons: short term (2025–2030), medium term (2031–2040), and long term (2041–2050) using scenario analysis.

Integrating stakeholder insights with Pattern's Corporate Risk Register allowed us to refine the initial long list of risks and opportunities into a prioritized shortlist for climate-scenario analysis. Figure 3 summarizes these priority risks and opportunities.

Note: [1] Shared Socioeconomic Pathways (SSPs) are a framework developed by the IPCC to explore potential future scenarios that combine socioeconomic development trends with associated greenhouse gas (GHG) emissions trajectories. Each scenario, such as SSP2-4.5 or SSP5-8.5, represents a distinct narrative about global population growth, economic development, technological progress, and policy choices, alongside the resulting radiative forcing levels. Together, the SSPs provide a foundation for assessing potential climate outcomes and evaluating the effectiveness of different mitigation and adaptation strategies.

Figure 1: Pattern's Approach to Determining Risk Materiality

Peer companies and Pattern SMEs identified extreme weather as a key risk to renewable energy assets, citing potential infrastructure damage, downtime, liability, insurance costs, supply chain disruption, and safety concerns. Hail risk is important as we expand our solar portfolio, while we also recognize chronic shifts in wind and solar resources as risks to monitor. Additional themes included policy and legal risks, such as uncertainty around renewable energy policies, grid constraints, compliance costs, as well as supply chain volatility and rising stakeholder expectations.

The global transition to a low-emissions economy also presents significant upside for renewable energy developers like Pattern. Interviews and market research highlighted opportunities in resource efficiency, asset resilience, access to new markets and capital, participation in carbon markets, and continued technology and geographic diversification. Growing energy demand and technological advancements in our sector also offer tremendous opportunity for the company, which we are exploring in greater detail through our climate scenario analysis.

Figure 2: Pattern SMEs Engaged by Climate Risk Category

Transition Risks & Opportunities

Policy & Legal	Government & Regulatory Affairs Regulatory & Corporate Compliance
Technology	Business Development Energy Systems Planning Energy Management Finance
Market	Operations Supply Chain Capital Procurement Business Development Regulatory & Market Affairs Energy Mgmt.—Trading & Commodities
Reputation	Business Development Regulatory & Market Affairs

Physical Risks

Acute	Meteorology Insurance Risk Management Energy Risk Management Field Operations
Chronic	Meteorology Energy Risk Management Energy Systems Planing

Figure 3: Prioritized Climate-Related Risks and Opportunities

PHYSICAL RISKS

Asset & Grid Infrastructure Damage
Extreme weather increases asset & grid damage, causing downtime.

Supply Disruptions
Severe weather delays construction, maintenance, and repair.

Insurance Pressure
Higher premiums and limited coverage pose financial risks.

Resource Variability
Shifts in wind or solar may reduce production and cash flow.

TRANSITION RISKS

Grid Congestion
Rising demand leads to curtailment and connection delays.

Carbon Pricing
Global carbon taxes drive up material and operational expenses.

Policy Uncertainty
Shifting climate policies increase investment and revenue risk.

Climate Accountability
Lagging on decarbonization may damage trust and deter investment.

OPPORTUNITIES

Operational Continuity
Reduce downtime through proactive climate resilience planning.

Insurance Savings
Lower premiums and improve coverage terms by demonstrating climate risk mitigation.

Asset Efficiency Gains
Identify opportunities to improve generation efficiency through adaptation measures (e.g., cooling upgrades, design changes).

Capital Access
Attract climate-aligned funding by showcasing strong risk management practices.

Reputation & Stakeholder Confidence
Demonstrate leadership in climate risk management, enhancing brand value and investor appeal.

Carbon Markets
Capitalize on rising demand for Power Purchase Agreements (PPAs) and Renewable Energy Certificates (RECs).

Renewables Investment
Attract public and private capital as demand for renewable energy grows.

Technology Innovation & Diversification
Identify new opportunities in grid infrastructure, distributed generation, green fuels, storage, and electric vehicles.

To capture a range of plausible climate-related outcomes, Pattern evaluated the prioritized physical and transition risks under two "bookend" emissions pathways, represented by the scenarios in visualized Figure 4 and summarized below:

> **Low-emissions scenario (≤ 2°C pathway)**
> We modeled physical risks using the IPCC SSP1-2.6 scenario, while we assessed transition risks and opportunities using the Network for Greening the Financial System (NGFS) Delayed Transition scenario. In addition, carbon prices from the NGFS Net Zero 2050 scenario were applied to provide a more conservative basis for assessing carbon pricing risk, as these prices are higher in the near term than those in the Delayed Transition scenario.
>
> **High-emissions scenario (worst-case, ≥3.0°C pathway)**
> We modeled physical risks using the IPCC SSP5-8.5 scenario, with transition risks and opportunities assessed under the NGFS Current Policies scenario.

We evaluated physical hazards across our utility-scale operating fleet using a third-party climate analytics platform, and qualitatively assessed transition risks and opportunities using narrative assumptions supported by market research, SME input, and the NGFS scenarios portal. Table 1 summarizes the key parameters and narrative assumptions for each scenario.

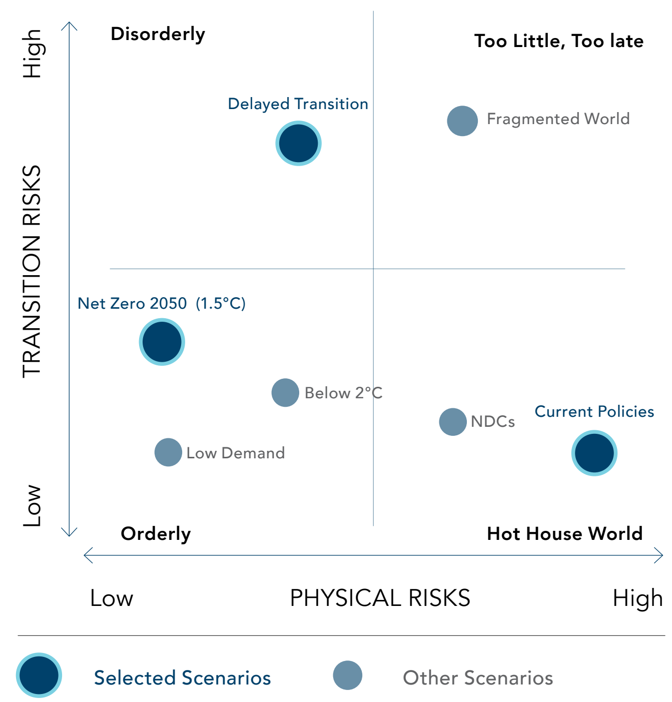
The NGFS Delayed Transition scenario assumes that global annual emissions do not begin to decline until 2030, reflecting a net zero pathway broadly consistent with current U.S. federal policy. Under this scenario, no new climate policies are introduced until 2030, and the level of action varies across countries and regions based on existing policy frameworks.

For a U.S. developer, this delayed action creates both opportunities and risks. On the upside, shovel-ready projects could benefit from a surge in demand once policies accelerate. On the downside, rapid renewable build-out after 2030 would intensify supply chain pressures, curtailment, and interconnection congestion as the grid struggles to keep pace.

Under the NGFS Delayed Transition scenario, steeper reductions are required after 2030 than in the NGFS Below 2°C and Net Zero 2050 scenarios to maintain a high probability of limiting warming below 2°C. This scenario requires rapid technological change and higher carbon prices in the medium term, leading to higher transition and physical risks compared to the Below 2°C and Net Zero 2050 scenarios.

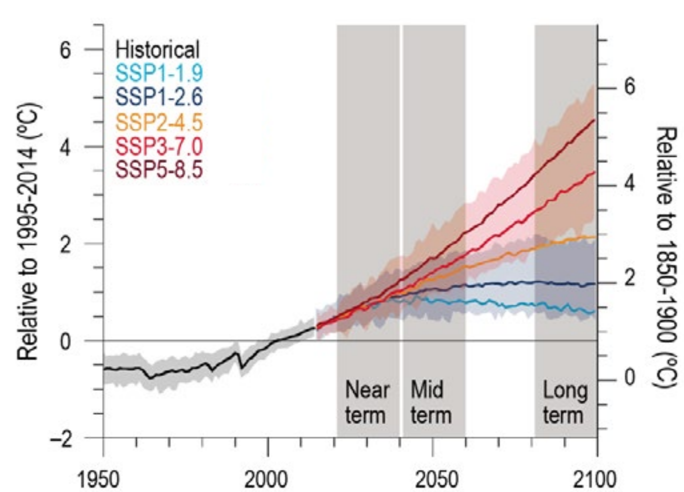
Figure 4: NGFS and IPCC Scenarios used for the Climate Risk Assessment

NGFS Scenarios and Associated Transition and Physical Risk Profiles



Positioning of scenarios is approximate, based on an assessment of physical and transition risks out to 2100.
www.ngfs.net/ngfs-scenarios-portal

IPCC Climate Scenarios and Projected End-of-Century Warming



SSP1-2.6 and SSP5-8.5 scenarios were applied to assess physical climate risks.
www.ipcc.ch/report/ar6/wg1/figures/chapter-4/figure-4-2

The NGFS Current Policies scenario assumes that only existing policies remain in place, the U.S. phases down federal incentives, and no strong carbon price emerges. Under this pathway, renewable energy development faces headwinds, including slower demand growth, weaker Renewable Energy Credit (REC) and Power Purchase Agreement (PPA) pricing outside of state programs, and a significant rise in physical risks that could threaten reliability and insurance costs and availability.

While we anticipate continued market signals supporting renewable energy demand, this scenario provides management a lens to gauge profitability under tepid policy support, modest carbon prices, and slower renewable energy growth, while also underscoring the mounting physical risks of a 3+°C world.

Table 1: Climate Scenario Narratives and Assumptions

Pathway	Scenario type	Scenario name	Key narrative elements	Approximate 2100 warming
Low-Emissions scenario	Transition Risks	NGFS Delayed Transition	• Policy delay until 2030, then abrupt policy acceleration. • Lower Carbon Dioxide Removal (CDR) capacity → higher carbon prices in the medium term compared to smoother 2°C pathways. • Emissions temporarily exceed the 2°C-consistent carbon pathway, followed by steep decline to realign with the 2°C target. • Renewable generation surges after 2030. • High market transition risk; moderate physical risk from brief emissions overshoot.	< 2°C
	Physical Risks	SSP1-2.6	• Rapid decarbonization and sustainable development. • CO2 peaks by 2020s, declines to net zero mid-century. • Physical hazards increase modestly; most remain within current thresholds. • Lower chronic risk; acute events intensify but manageable with adaptation.	≤ 2°C
High-Emissions scenario	Transition Risks	NGFS Current Policies	• No new climate policies beyond those in force today. • Emissions rise until 2080s, then plateau. • Carbon pricing is patchy and generally low; prices stay too small to shift behavior at scale. • Renewable deployment continues but grows at a steadier, lower rate. Fossil fuel sources remain dominant in overall energy mix. • Sets the stage for severe physical impacts.	≥ 3°C
	Physical Risks	SSP5-8.5	• Fossil-fuel-intensive growth; minimal mitigation. • CO2 roughly doubles 2020 levels by 2100. • Extreme heat, drought, wildfire, hurricanes, sea-level rise accelerate sharply. • Very high physical risks: infrastructure design thresholds exceeded, supply chains disrupted, insurance costs surge, insurance availability decreases.	≥ 4°C

Potential Impacts of Climate-Related Risks and Opportunities

Pattern conducted a scenario analysis to assess how different climate pathways could affect our business, consistent with TCFD recommendations. The analysis addresses both physical risks (acute events and chronic climate shifts) and transition risks and opportunities (policy, technology, market, resource efficiency, and stakeholder dynamics).

We qualitatively assessed risks and opportunities using Pattern's ERM framework across short-, medium-, and long-term horizons under low-emissions and high-emissions scenarios, employing the scenario assumptions described above. Criteria used to evaluate risk severity include likelihood, impact, speed of onset, and vulnerability, as described under the Risk Management section of this report.

The following subsections summarize the key insights from this analysis:

— **Physical risks:** potential impacts of extreme weather events and long-term climate shifts on our assets and operations.

— **Transition risks**: potential impacts associated with policy, market, and regulatory developments.

— **Opportunities**: areas where we identified significant opportunity for value creation.

Physical Risk Assessment

Pattern evaluated physical climate risks across our operational portfolio of 32 facilities using a third-party climate analytics platform that provides site-level hazard scores and exposure metrics under multiple IPCC climate scenarios.

To further assess the potential long-term impacts of climate change on wind energy resources, Pattern leveraged findings from a multi-year research initiative examining the sensitivity of wind energy generation to evolving global weather patterns.

In addition, we used market research and SME insights to evaluate broader physical risk factors, including potential supply chain disruptions from extreme weather events, as well as rising insurance premiums and reduced coverage availability in high-risk regions.

Table 2 summarizes Pattern's qualitative assessment of physical risks under the low-emissions (SSP1-2.6) and high-emissions (SSP5-8.5) scenarios. The accompanying summary outlines hazard severity by asset type and region, along with key findings from the wind resource research initiative, providing additional context for Pattern's overall exposure to physical climate risks.

Table 2: Physical Risk Scenario and Risk Ratings

		Low-Emissions Scenario			High-Emissions Scenario		
Risk Description	Risk Type	Short-Term	Medium-Term	Long-Term	Short-Term	Medium-Term	Long-Term
Asset & Grid Infrastructure Damage	Acute	Medium	Medium	Medium	Medium	High	High
Supply Disruptions	Acute	Low	Medium	Low	Medium	High	High
Insurance Pressure	Acute	Medium	Medium	Medium	Medium	High	High
Resource Variability Shifts	Chronic	Low	Low	Low	Low	Low	Low

Potential Impacts of Physical Risks

— **Asset and Grid Infrastructure Damage**
The increasing frequency and severity of extreme weather events due to climate change may elevate financial risks for Pattern, resulting from potential asset damage and revenue losses due to operational downtime.

— **Supply Disruptions**
An increase in number and severity of extreme weather events could disrupt Pattern's supply chain, affecting the construction, maintenance, and repair schedules of Pattern's assets, potentially leading to increased costs and revenue losses due to delays and long lead times.

— **Insurance Pressure**
Rising frequency and severity of extreme weather events may lead to higher insurance premiums and limited access to insurance products in certain regions, impacting financial planning and project development schedules.

— **Resource Variability Shifts**
Long-term changes in wind or solar energy resources may affect revenue generation from our assets in specific regions, potentially reducing production levels and adversely affecting cash flows.

Hazard Severity by Asset Type and Region

Overall, Pattern's operational portfolio demonstrates a low 'All Peril Climate Score' under the high-emissions scenario (SSP5-8.5), reflecting relatively limited exposure across the eight hazards assessed compared to a global benchmark.

The most material exposures are to cold weather (high exposure), wildfire (medium exposure), and drought (medium exposure), while exposure to wind, heat, precipitation, and flood remains low. An aggregate hazard score is not available for hail due to modeling limitations. However, analysis of the number of days per year where environmental conditions are conducive to severe thunderstorm formation indicates that ~60% of assets fall within the low or lowest hazard levels, while ~30% fall within the high or highest hazard band.

Considering both exposure levels and potential asset impacts, wildfire and hail represent the most significant physical hazard risks across Pattern's portfolio. Table 3 provides an overview of hazard impacts by technology type and outlines key mitigation measures currently in place to manage these exposures.

Note: [2] Climate Scores translate physical climate hazards into a numerical score on a 0–100 scale, using projections for 2020 and 2050 to capture changes in hazard exposure over time. Lower scores indicate lower exposure to climate hazards. The All Peril Climate Score combines the hazard and change scores and benchmarks this value against a global weighted average of the scores in populated areas.

Cold

Cold-weather hazard exposure is most relevant for sites in Canada, the Midwestern U.S., and parts of the U.S. Southwest. Exposure decreases under a high-emissions scenario compared to a low-emissions scenario, reflecting warming trends. Overall, cold stress has a limited impact on Pattern's assets and annual energy production, and we already account for it in our energy assessments. However, extreme snowfall and ice accumulation can still cause component damage or temporarily restrict site access, though we mitigate these risks through engineering design standards and established operational procedures.

Wildfire

Wildfire risk is primarily concentrated in the U.S. Southwest, with exposure projected to increase under the high-emissions scenario. Wildfire can cause severe damage to facilities and pose safety risks to personnel. To address this, Pattern has implemented a Wildfire Management Program that includes site-specific assessments, mitigation measures, and dedicated resources to reduce exposure and enhance preparedness.

Drought

Nearly half of Pattern's portfolio is located in regions with high water stress, defined as the ratio of human water demand to water supply from local and upstream watersheds. Exposure is projected to intensify over time under the high-emissions scenario. However, water stress has a generally low impact on our assets, since wind turbines and solar panels do not directly consume water to operate.

Hail

Exposure to hail, measured by environmental conditions conducive to severe thunderstorm formation, is projected to rise under both the low-emissions and high-emissions scenarios, with greater severity under the high-emissions scenario. Risk is highest in the U.S. states of Texas, Kansas, and Missouri. Hail poses a greater risk to solar assets than wind, and Pattern incorporates mitigation measures into project design, procurement, and operations, including enhanced glass thickness, hail stowing strategies, and Leading Edge Protection for blades.

Wind

Extreme wind events, such as tropical cyclones, tornadoes, derechos, and microbursts, can have significant impacts on wind, solar, and transmission assets; however, overall portfolio exposure is low compared to a global benchmark. Higher-risk areas include the Texas coast and Puerto Rico, with only modest increases in exposure projected under the high-emissions scenario through 2050. Wind-related risks are mitigated through asset design standards, control systems, and stowing strategies.

Precipitation

Precipitation hazard risk across Pattern's portfolio is generally low, with higher exposure concentrated in Puerto Rico, Texas, Missouri, and northern California. Risk increases under both the low-emissions and high-emissions scenarios, with greater escalation under the latter. Overall, impacts on wind, solar, and transmission assets are limited and mitigated through established operational practices.

Heat

Exposure to heat increases under both the low-emissions and high-emissions scenarios, with the greatest rise in risk under the high-emissions scenario. The highest exposure is in Texas, California, Nevada, Kansas, and Missouri, though overall risk remains low compared to a global benchmark. Impacts on assets are generally limited. We account for temperature-related performance losses in energy assessments.

Flood

Flood is the lowest-rated hazard across Pattern's portfolio, with exposure projected to remain essentially unchanged through 2050 under both low-emissions and high-emissions scenarios. The highest exposure occurs at sites near the Great Lakes, where established mitigation strategies are in place to manage risk.

Table 3: Physical Hazard Impacts and Pattern Mitigation Measures

Hazard	Asset	Impact	Pattern Mitigation Measures
Cold	**Wind**	Extreme cold could cause component damage if wind turbine generator (WTG) heating systems can't operate. Ice accumulation on blades could also cause imbalances, reduce efficiency, and in severe cases, trigger automatic shutdowns. However, many modern turbines are designed with cold weather operation in mind, incorporating features like blade heating systems where warranted.	Low temperature losses are expected to have a negligible impact on the long-term annual production and are accounted for in our energy assessments. Additionally, WTG Original Equipment Manufacturers (OEMs) provide a site suitability assessment to deem the WTG to be suitable for the climatic conditions at the project site for the project life. Wind turbine operational data is continuously analyzed via the turbine controller and wind farm Supervisory Control and Data Acquisition (SCADA) system. WTGs are equipped with operational low temperature limits via a "cold weather package" and will shut down or derate to protect components. Pattern also employs operational strategies and preemptive shutdowns during icing conditions to reduce impacts.
Cold	**Solar**	During a snow storm, the weight of snow and ice accumulation has a high potential impact to solar. There could also be performance degradation due to low temperatures.	Low temperature losses are expected to have a negligible impact on the long-term annual production and are accounted for in our energy assessments. Pattern employs operational strategies, such as manual snow removal during extreme snowfall events, to reduce impacts.
Cold	**Transmission**	An extreme cold wave can lead to structural damage to poles and wires, especially if ice accumulation is combined with high winds.	Our gen-tie infrastructure is engineered in compliance with the National Electrical Safety Code (NESC) to endure high wind speeds and ice accumulation.
Wildfire	**Wind**	While individual turbines are not highly flammable, wildfires can damage ground-level electrical equipment, control systems, and transmission infrastructure. The clearings around turbines can sometimes act as firebreaks.	Pattern adheres to mandatory vegetation management requirements for insurance, regulatory compliance, and prudent operational requirements including regular inspections. Our teams regularly monitor wildfire risk and its potential impact on our facilities. Pattern's Safety Management System (SMS) describes emergency action plans for our operating sites, including fire response. Our Wildfire Management Program expands on fire safety plans within the Emergency Preparedness Response Procedure of our SMS. The program includes documentation of roles, responsibilities, and expectations for facility management and support teams, education on best practices focusing on personnel safety and operating obligations, site-tailored fire equipment standards and communication resources, and a template for Wildfire Risk Assessments conducted by third-party experts.
Wildfire	**Solar**	While solar panels themselves are not highly flammable, intense heat from nearby fires can damage panels, warp mounting structures, or destroy wiring and control systems. Smoke and ash from wildfires can significantly reduce panel efficiency by blocking sunlight, and ash accumulation may require extensive cleaning.	
Wildfire	**Transmission**	Wildfires can cause severe damage to transmission and gen-tie infrastructure, resulting in costly equipment replacement and operational downtime.	
Drought	**Wind**	No major impacts identified.	
Drought	**Solar**	No major impacts identified.	
Drought	**Transmission**	No major impacts identified.	
Flood	**Wind**	Wind turbines are typically elevated, reducing their vulnerability to flooding. The main structures, including towers and nacelles, are designed to withstand water exposure. However, flooding can potentially damage ground-level equipment and foundations.	Regular inspections to ensure all drainage areas, swales, culverts, etc. are clear and functioning as designed to divert water away from operating equipment.
Flood	**Solar**	While panels themselves are usually elevated, flood waters can damage ground-mounted equipment, such as inverters, transformers, and wiring. Severe flooding might erode the foundations of panel mounting structures or deposit debris that shades or damages panels. Post-flood cleanup can be time-consuming, potentially leading to extended downtime.	
Flood	**Transmission**	Severe flooding may erode foundations of structures.	Regular inspections to ensure all drainage areas, swales, culverts, etc. are clear and functioning as designed to divert water away from structures and ground-mounted equipment.
Extreme Wind	**Wind**	While wind turbines are designed to operate in high winds, extreme wind events pose significant risks. Modern turbines have built-in mechanisms to feather blades and shut down in very high winds, but winds beyond design limits can cause structural damage to blades, towers, or nacelles.	Our WTG OEMs provide site suitability assessments that deem the WTG to be suitable for the climatic conditions at the project site for the project life. This assessment is also used in the foundation loading calculations. Additionally, small annual energy production losses from high winds have been accounted for in the energy assessment analysis. Wind turbine operational data is continuously analyzed via the turbine controller and wind farm SCADA system. In the event of a high wind event over the WTG cut out speed, WTG controls will shut the WTG down, while maintaining proper yaw position in the wind.
Extreme Wind	**Solar**	Solar panels present a large surface area, making them vulnerable to high-wind events. Extreme winds can cause panels to detach from their mountings or damage the panels themselves. Even if panels remain attached, wind-borne debris can crack or shatter panel surfaces. For rooftop solar, high winds during construction can cause significant damage and a safety hazard to surrounding areas.	Our solar and tracker OEMs provide site suitability assessments that deem them to be suitable for the climatic conditions at the project site for the project life. The trackers enable stowing during high wind events, mitigating damage from extreme winds. Our DG affiliates' construction teams closely monitor weather conditions and plan construction activities accordingly. Racking companies implement ballast plans with roof and structure attachments.
Extreme Wind	**Transmission**	Structural damage to poles and wires. Could cause significant damage if coupled with ice accumulation.	Our gen-tie infrastructure is engineered in compliance with the NESC code to endure high wind speeds and ice accumulation.
Heat	**Wind**	Extreme heat can impact the efficiency of electrical components and may require more frequent cooling system maintenance. In addition, long term increases in temperature reduces air density, which reduces power output.	Our WTG OEMs provide a site suitability assessment to deem the WTG to be suitable for the climatic conditions at the project site for the project life. Wind turbine operational data is continuously analyzed via the turbine controller and wind farm SCADA system. In the event a high temperature event occurs above the design limits; WTG controls will shut the WTG down or derate to protect components. High temperature losses are expected to have a negligible impact on the long-term annual production and are accounted for in our energy assessments.
Heat	**Solar**	Solar panels are designed to operate in sunny conditions, but extreme heat can reduce their efficiency. Most panels experience a decrease in power output as temperatures rise above their rated operating temperature. Prolonged extreme heat can also accelerate the degradation of panel materials and electrical components.	High temperature losses are expected to have a negligible impact on the long-term annual production and are accounted for in our energy assessments.
Heat	**Transmission**	No major impacts identified.	
Precipitation	**Wind**	Turbines are designed to operate in various weather conditions, including heavy rain. The main structures are sealed against water intrusion. However, the combination of extreme rainfall, water droplet sizes, and atmospheric aerosols can lead to leading edge erosion on the WTG blades. Over time, this can lead to reduced production due to poor aerodynamics.	We utilize Leading Edge Protection from OEMs and after-market suppliers in addition to annual blade maintenance plans. We also employ a drone inspection strategy across the fleet for our sites to identify damage and inform maintenance plans.
Precipitation	**Solar**	Temporary delays to site access in the event of excessive hourly and daily rainfall rates.	Our meteorologists provide hourly production forecasts and early warnings about potential weather disruptions, helping our Field Operations Team manage risks.
Precipitation	**Transmission**	Temporary delays to site access in the event of excessive hourly and daily rainfall rates.	Temporary delays to site access in the event of excessive hourly and daily rainfall rates.
Hail	**Wind**	Large hail can cause blade damage only after corrosion has persisted for extended periods of time.	We utilize Leading Edge Protection from OEMs and after-market suppliers in addition to annual blade maintenance plans. We also employ a drone inspection strategy across the fleet for our sites to identify damage and inform maintenance plans.
Hail	**Solar**	Significant damage to solar farm equipment can occur during a hail event.	We assess hail risk for a site and evaluate options for increasing the thickness of glass to enhance hail resistance during site design and procurement. Additionally, we collaborate with our tracker supplier to optimize stow angles for improved hail mitigation.
Hail	**Transmission**	Hail can cause potential damage to poles, structures, and ground-mounted equipment.	We employ drone inspection plans for our sites to identify damage.

Select Energy & Dynamic Energy—Physical Risk Insights

Financial exposure to physical risks among Pattern's U.S. distributed generation affiliates is generally low. To date, hail risk has not been a significant concern in the territories where they operate. High wind speeds, particularly at coastal locations, represent a higher risk, especially during the construction phase. They mitigate these risks through proactive weather monitoring and robust structural engineering of solar racking systems. Winter storm risks are addressed through situational snow removal measures implemented during construction, where installation teams may clear snow from rooftops to improve safety and efficiency.

Resource Variability Shifts

Understanding how future global climate outcomes may influence Pattern's energy resources helps improve forecasting and inform long-term commercial decisions. To assess resource variability risks, Pattern partnered with external consultants and Cornell University to apply advanced regional and global climate models in evaluating long-term wind resource exposure through 2050 and 2100. The study incorporated a review of more than 200 academic papers, historical wind speed analyses, and future climate scenario projections.

The research analyzed 35 future climate scenarios simulated by CMIP5 and CMIP6 models[3]. One component examined high wind gusts at Pattern's facilities and changes in the frequency distributions of the wind resource to determine whether there was an increase in low- and high-wind periods. The study also correlated fleet performance with climate indices, which will help enhance our sub-seasonal and seasonal forecasting capabilities.

Overall, the findings indicated no material decline in wind resources across Pattern's portfolio, resulting in a low estimated financial impact even under a high-emissions (SSP5-8.5) scenario. We expect technological advancements in turbine efficiency and forecasting to mitigate minor fluctuations in resource availability over time.

Nevertheless, given the strategic importance of wind resources to Pattern's business, we plan to continue evaluating emerging research to monitor potential long-term shifts across our portfolio. As Pattern expands our portfolio to include additional solar assets, we will also assess potential climate-related impacts on solar resource availability, such as the effects of wildfire smoke on solar radiation.

Note: [3] CMIP5 (Coupled Model Intercomparison Project Phase 5) and CMIP6 (Phase 6) are international climate modeling frameworks coordinated by the World Climate Research Programme (WCRP). They provide standardized sets of simulations from global climate models used to assess past, present, and future climate changes. CMIP5 underpins the IPCC's Fifth Assessment Report (AR5), while CMIP6 supports the Sixth Assessment Report (AR6), incorporating updated emission scenarios (SSPs), higher spatial resolution, improved representation of Earth system processes, and greater ensemble diversity. These models are foundational for climate risk assessments and scenario analysis in line with TCFD guidelines.

Transition Risk Assessment

Pattern prioritized the following transition risks for scenario analysis based on market research and SME input: Grid Congestion, Carbon Pricing, Policy Uncertainty, and Climate Accountability. We determined Grid Congestion and Policy Uncertainty to be the primary risks for our business. Table 4 summarizes the scenario assumptions applied to assess these risks and illustrates how risks may evolve under the two climate scenarios.

Potential Impacts of Transition Risks

— **Grid Congestion**
Increased demand and competition in the renewable energy sector could lead to greater grid congestion and more frequent curtailment.

— **Carbon Pricing**
A global increase in carbon taxes could raise the cost of energy-intensive materials and components.

— **Policy Uncertainty**
Elimination or changes to existing renewable portfolio standards, tax credits, or similar policies could negatively impact future demand and cash flows, and liquidity. In the short term, this risk is particularly relevant to operations in the U.S., where changes in investment conditions, reductions in subsidies, or shifting policy priorities could increase uncertainty for future projects.

— **Climate Accountability**
As climate awareness grows, stakeholders—including investors, customers, and the public—may expect leadership in addressing climate change. Failing to meet their expectations could harm our reputation and brand value.

Table 4: Transition Risk Scenario and Risk Ratings

		Low-Emissions Scenario			High-Emissions Scenario		
Risk Description	**Risk Type**	**Short-Term**	**Medium-Term**	**Long-Term**	**Short-Term**	**Medium-Term**	**Long-Term**
Grid Congestion	Market	High	High	Medium	High	High	High
Policy Uncertainty	Policy and Legal	High	Low	Low	High	High	High
Climate Accountability	Reputation	Medium	High	Medium	Medium	Medium	Low
Carbon Pricing	Policy and Legal	Low	High	High	Low	Low	Low

Select Energy & Dynamic Energy—Transition Risk Insights

Grid congestion and policy uncertainty represent the most significant risks for Pattern's U.S. distributed generation affiliates. Pattern works closely with our affiliates to share updates and develop strategies to mitigate policy-related risks, including potential changes to federal tax credits, state incentives, and tariffs. Our affiliates are also actively engaged with local policymakers, utilities, and industry associations to advocate for supportive policies and infrastructure investments, particularly those that enhance grid interconnection and modernization.

Opportunity Assessment

Given the nature of Pattern's business, we identified a wide range of opportunities through market research and SME input. While the scale of these opportunities varies across the low-emissions and high-emissions scenarios, we assessed all of them as having high or medium potential across scenarios and time horizons. Market and technology opportunities are greater under the low-emissions scenario, while opportunities related to resilience and resource efficiency are more prominent under the high-emissions scenario. We evaluated opportunities using the same rating scale applied to risks, except for vulnerability, which we excluded from the assessment. Figure 5 summarizes the qualitative assessment of opportunities under both scenarios through 2050.

Figure 5: Transition Opportunity Landscape

High-Impact, Near-Term

- Renewables Investment
- Access to Capital
- Technology Innovation & Diversification
- Operational Continuity

Emerging, Longer-Term

- Insurance Savings
- Asset Efficiency Gains
- Carbon Markets
- Reputation & Stakeholder Confidence

Potential Impacts Transition Opportunities

— **Carbon Markets**
The global rise in carbon-pricing mechanisms is likely to boost demand for Power Purchase Agreements (PPAs) and Renewable Energy Certificates (RECs).

— **Renewables Investment**
Growing demand for renewable energy may drive increased investment from both private and public actors.

— **Technology Innovation and Diversification**
There are numerous technological opportunities to expand into new clean energy products, including grid modernization, green fuels (hydrogen and ammonia), distributed generation, repowering, storage, and EVs.

— **Operational Continuity**
Climate extremes, such as wildfires, storms, and hail, pose risks to operational uptime. Proactive resilience measures, including site hardening and adaptive design, mitigate losses and create a competitive advantage.

— **Insurance Savings**
Demonstrating strong physical risk mitigation could help lower premiums and improve coverage terms.

— **Asset Efficiency Gains**
Upgrades such as enhanced cooling and design changes can improve generation efficiency and extend asset lifespan.

— **Capital Access**
Robust ESG and climate risk management practices could attract investors and unlock access to climate-aligned financing, such as green bonds and sustainability-linked loans.

— **Reputation and Stakeholder Confidence**
Leading on climate risk management and decarbonization could enhance brand value, investor trust, and customer engagement.

Business Resilience

Pattern's business model is centered on renewable energy generation, positioning us to benefit from the global transition to a low-emissions economy and from rising energy demand under a high-emissions scenario, including emerging drivers such as Artificial Intelligence (AI) and data centers. The resilience of our strategy depends on effectively managing both physical risks from climate change and transition risks arising from policy, market, and stakeholder dynamics across a range of plausible futures.

The results of a climate scenario analysis indicate that Pattern remains resilient under both low-emissions and high-emissions scenarios, though risk and opportunity profiles differ. We have established strong governance, monitoring, and mitigation measures (see Table 6) that help reinforce our business resilience.

Under a low-emissions scenario, rapid policy action and buyer mandates create opportunities for shovel-ready projects, technology innovation, and access to climate-aligned capital, while also heightening near-term risks from supply chain constraints and grid congestion.

Under a high-emissions scenario, although limited policy advancement may moderate renewable market momentum, we expect strong demand for clean energy and transmission infrastructure to persist, particularly as emerging sectors such as AI accelerate load growth. A high-emissions scenario also amplifies exposure to physical risks and insurance pressures, making resilience measures, asset hardening, and disciplined risk management essential to long-term performance.

Pattern's diversified asset base, expertise in transmission technology, repowering strategy, and integration of climate due diligence in project development, reinforced the company's resilience. Every new project undergoes a comprehensive physical climate risk assessment, with identified risks mitigated through design enhancements, siting decisions, operational practices, and insurance coverage. At the enterprise level, material climate risks are captured in the Corporate Risk Register and reviewed regularly by risk owners, executive leadership, and the Board.

Over the past 15 years, Pattern has consistently demonstrated our ability to scale, adapt, and lead in an era when meeting energy demand is both urgent and complex. As electrification accelerates, we are investing in the infrastructure needed to build a modern, reliable grid. SunZia Transmission and Southern Spirit Transmission, which will enhance regional connectivity and reliability, exemplify how we are expanding capacity and flexibility across markets increasingly shaped by weather volatility.

Our approach to site optimization through repowering further illustrates our commitment to operational excellence and long-term asset performance. By extending asset life and improving efficiency, we maximize value for our customers and stakeholders. Gulf Wind, our first repowering effort, has already achieved a measurable increase in availability. Ocotillo Wind's targeted Blade Replacement Program demonstrates our ability to innovate within real-world constraints to enhance reliability and performance.

Looking ahead, Pattern will continue to strengthen our risk assessment and adaptation strategies to anticipate evolving climate risks, capture emerging opportunities, and safeguard long-term value for stakeholders across diverse future pathways.

Solect Energy & Dynamic Energy—Transition Opportunity Insights

Our U.S. distributed generation affiliates support Pattern's broader market and technology diversification strategy and are well-positioned to capitalize on the growing demand for renewable energy and related investments, particularly under a low-emissions scenario. Together with Solect and Dynamic, Pattern can identify emerging markets and new business opportunities while strengthening joint brand recognition and market presence.

Risk Management

Through the integration of climate-related risks into our broader ERM framework, we consider them alongside other strategic, financial, operational, compliance, and reputational risks. Our approach combines enterprise-wide oversight with project-level assessments, enabling us to capture both corporate and asset-specific risks. This integration supports proactive mitigation, strengthens resilience, and aligns with evolving stakeholder and regulatory expectations.

Risk Identification and Assessment

Pattern applies a structured process to identify and assess climate-related risks and opportunities at both the enterprise and project level, consistent with our ERM framework. This approach captures both corporate and asset-specific risks, embedding climate considerations into strategic planning, investment decisions, and the management of our business and assets.

Following this 2025 enterprise climate risk assessment, we plan to conduct enterprise-level climate risk assessments every other year to complement our ERM program's ongoing activities and comply with regulatory reporting obligations.

We integrate ESG governance into our project development and management process, helping to ensure we evaluate climate risks and mitigation measures from early-stage design through long-term operations.

During project planning, we conduct risk assessments to identify site-specific physical hazards, such as flooding, hail, extreme wind, and wildfire, evaluate their likelihood under multiple climate scenarios, and quantify potential financial impacts for both the project and the company. SMEs confirm a risk summary score for each hazard and technology type and agree on mitigation actions before a project advances to final investment.

Table 5: Risk Rating Criteria Definitions

Criteria	Definition
Likelihood (L)	Possibility that a given event will occur, assessed qualitatively: low, medium, high.
Impact (I)	Evaluates the potential impact of a risk event on Pattern using qualitative or quantitative criteria (e.g., financial, reputational, regulatory, operational, safety), rated as high, medium, or low.
Speed of Onset (S)	Represents how quickly a risk could materialize, rated as high, medium, or low. Helps inform risk response planning and overall risk assessment.
Vulnerability (V)	Reflects Pattern's susceptibility to a risk event based on preparedness, agility, and adaptability, rated qualitatively as high, medium, or low. Helps gauge risk management effectiveness and informs the overall risk rating.

Our enterprise and project-level climate risk assessments draw on multiple inputs, including:

- Market research and peer benchmarking
- External climate analytics platforms and Pattern-funded wind and solar resource research
- Project financial models and insurance parameters
- Cross-functional expertise from Meteorology, Sustainability, Insurance/Risk, Field Operations, Pre-Construction Design, Capital Procurement, Finance, and Business Development

Risk Mitigation

Pattern employs a range of mitigation strategies to manage identified climate-related risks and capitalize on opportunities. Our ERM program provides the framework for assessing risk severity and determining whether we should mitigate, transfer, accept, or control risks.

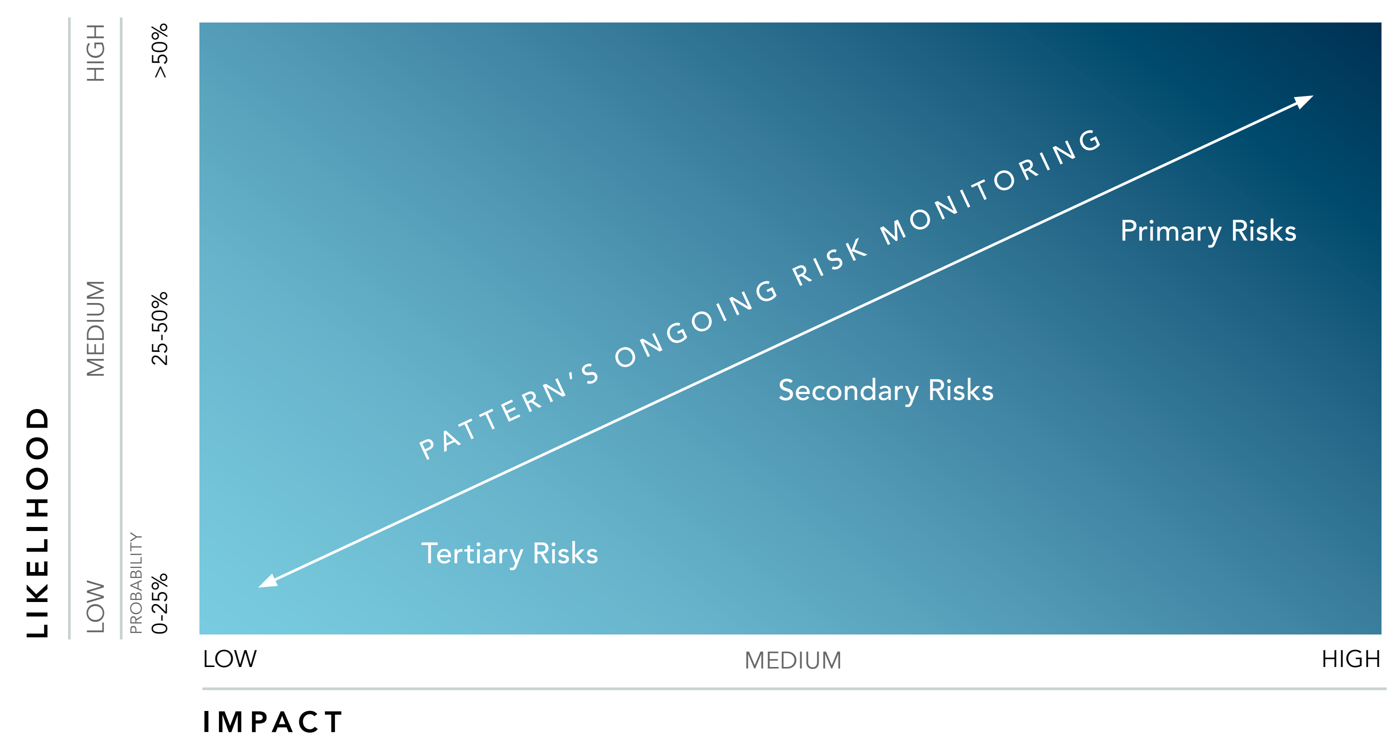
On a monthly basis, risk owners across the organization review and update their designated risks in the Corporate Risk Register. These reviews include a description of current mitigation measures, progress to date, planned near-term actions, and approaches for ongoing monitoring.

Risk owners also document any actions not taken, mitigation measures that proved ineffective, and emerging areas of concern that may require revised strategies. They assess potential financial exposure and rate each risk against four dimensions (likelihood, impact, speed of onset, and vulnerability) using a high/medium/low scale (Table 5). Executive Leadership reviews these assessments and mitigation strategies, with a summary ultimately presented to the CEO.

We evaluated climate-related risks and opportunities using this ERM framework, with additional analysis of how likelihood, impact, speed of onset, and vulnerability may evolve across short-, medium-, and long-term horizons under both a low-emissions and high-emissions scenario. Qualitative scenario narratives were developed using insights from the NGFS scenario portal and informed the rationale for risk ratings.

In alignment with the company's enterprise risk assessment approach, the short-term horizon determines the overall risk rating. We consider risks rated "Primary" in the risk matrix (Figure 6) material for this climate risk assessment. Medium- and long-term assessments are used by management to anticipate how risk levels may change over time and to inform forward-looking planning.

Figure 6: Pattern's Risk Matrix



The following table provides a high-level summary of the mitigation strategies Pattern uses to manage identified climate-related risks and opportunities.

Table 6: Pattern Risk Mitigation Measures

Risk Type	Risk Sub Type	Risk Short Description	Pattern Mitigation Measures
Physical	**Acute**	Asset & Grid Infrastructure Damage—Extreme weather increases asset and grid damage, causing downtime.	Pattern mitigates physical risks through a deep understanding of weather, energy pricing, market exposure, and regulatory dynamics, supported by close coordination among our Field Operations, Energy Management, and Meteorology Teams. To manage energy pricing risk caused by weather-related downtime, the Energy Management Team operates under a market risk policy that incorporates hedging strategies, trading controls, and defined trade limits with stop/loss triggers. During facility operations, we rely on real-time weather forecasting and modeling, with meteorologists providing hourly production forecasts and early warnings of disruptions to support proactive management. Pattern's 2023 acquisition of Vibrant Clean Energy enhanced our ability to simulate long-term energy flows and anticipate grid capacity constraints under different climate scenarios. Preparedness is further supported through compliance with North American Electric Reliability Corporation (NERC) requirements, regular weatherization drills, and our Safety Management System (SMS), which establishes emergency action plans at all sites. Hazard- and asset-specific mitigation measures are summarized in Table 3.
Physical	**Acute**	Supply Disruptions—Severe weather delays construction, maintenance, and repair.	Pattern's mitigation measures include supplier diversification, bulk purchasing agreements to lock in pricing, and inventory storage strategies to reduce availability risks, including those linked to extreme weather events.
Physical	**Acute**	Insurance Pressure—Higher premiums and limited coverage pose financial risks.	Pattern integrates site-level climate risk assessments early in the project development process to identify high-risk physical hazards that could affect insurance premiums or coverage availability, aiming to reduce exposure before final investment. Insurance coverage and standard or engineered Probable Maximum Loss (PML) estimates are incorporated into these assessments whenever available. Pattern's strong reputation for physical risk resilience further supports favorable relationships with insurers, while collaboration with investors helps align project risk profiles with financing risk appetite.
Physical	**Chronic**	Resource Variability—Shifts in wind or solar may reduce production and cash flow.	Pattern invests in research partnerships with universities and consultants to assess how climate volatility may affect wind and solar resource availability under multiple climate scenarios. These insights enhance our resource modeling, strengthen long-term forecasting, and support more informed commercial decision-making.
Transition	**Market**	Grid Congestion—Rising demand leads to curtailment and connection delays.	Pattern maintains a robust public policy framework and stakeholder engagement strategy, with priority focus areas including grid resiliency and network upgrades. We evaluate interconnection during our project siting and development to reduce curtailment and congestion risks across our portfolio. Our strategy to invest in large-scale transmission infrastructure, exemplified by SunZia Transmission, positions us to benefit from growing transmission demand as more energy resources come online. In parallel, our repowering strategy allows us to unlock incremental project value without incurring new interconnection risks.
Transition	**Policy & Legal**	Carbon Pricing—Global carbon taxes drive up material and operational expenses.	Pattern measures greenhouse gas (GHG) emissions across Scope 1, Scope 2, and select Scope 3 sources, enabling us to identify hot spots for potential carbon pricing exposure within our value chain. We also continue to evaluate GHG emissions reduction strategies applicable to an operator of renewable energy assets. In addition, through our Supplier Code of Conduct, we engage suppliers on ESG topics, such as environmental stewardship, GHG emissions, and energy efficiency.
Transition	**Policy & Legal**	Policy Uncertainty—Shifting climate policies increase investment and revenue risk.	Pattern's Government and Regulatory Affairs Team actively monitors federal and state policy changes, including Renewable Portfolio Standard (RPS) program updates in strategic markets. A cross-functional working group evaluates potential impacts and develops strategies to address policy shifts, including those relevant to our distributed generation affiliates. In addition, we are active in trade associations and advocacy coalitions to participate in policy development, exchange best practices, and advocate for unified positions when engaging with legislators, regulators, and grid operators on solutions to market and regulatory barriers.

Pattern is active in trade associations and advocacy coalitions to drive engagement with industry peers and stakeholders and to help find unified solutions to challenges.

Industry Trade Organizations

- **Advanced Energy United**
  Board Member
- **Advanced Power Alliance**
  Executive Committee Member
- **American Clean Power Association**
  Founder, Board Member
- **American Council on Renewable Energy**
  Board Member
- **Asociación Mexicana de Energía Eólica (Mexican Wind Energy Association)**
  Executive Committee Member: Founding Member
- **Asociación Mexicana de Energía Solar (Mexican Solar Energy Association)**
  Member through our partnership with CEMEX Energía
- **Canadian Renewable Energy Association**
  Non-voting Board Member, Quebec Steering Committee Member
- **Clean Energy Buyers Association**
  Member
- **Clean Grid Alliance**
  Board Member
- **Interwest Energy Alliance**
  Board Member
- **North American Generator Forum**
  Member

Integration into Enterprise Risk Management Strategy

Pattern's ERM program provides a systematic process for identifying, assessing, and mitigating risks at both the enterprise and project level, including those related to priority ESG topics and climate. Designated risk owners use a standardized framework to document and rate strategic, financial, operational, compliance, and reputational risks monthly. The Corporate Risk Register includes climate-related hazards, such as extreme weather events, with dedicated risk owners and defined mitigation strategies.

Project-level and enterprise-wide climate risk assessments further strengthen our ERM process. For each climate-related risk and opportunity identified through these assessments, we apply Pattern's ERM rating framework to evaluate likelihood, impact, speed of onset, and vulnerability across short-, medium-, and long-term horizons under multiple climate scenarios. Results from the climate risk assessments are reviewed with SMEs and presented to management to inform ongoing risk evaluation, prioritization, and decision-making.

Metrics and Targets

The company currently tracks a focused set of metrics and qualitative information to monitor climate-related risks and opportunities, including enterprise risk management indicators and annual GHG emissions.

Although our suite of metrics is evolving, these measures provide valuable insight into both transition and physical risk exposure. Over time, we will broaden the scope of climate-related metrics and targets to enhance our ability to assess resilience and demonstrate progress to stakeholders.

Performance Metrics

Designated risk owners conduct monthly risk reviews through our ERM program. These reviews include an evaluation of mitigation plan performance, with findings presented to senior leadership for feedback and follow-up actions. This process enables Pattern to track performance at the risk level, monitor progress against mitigation measures, and integrate climate-related considerations into broader enterprise strategy.

In addition to risk reviews, Pattern tracks our GHG emissions for Scope 1, Scope 2, and select Scope 3 categories based on a materiality assessment. Tracking emissions performance provides a basis for evaluating exposure to transition risks such as carbon pricing, regulatory compliance, and reputational considerations. We are improving our analytical capabilities to identify efficiency and reduction opportunities by implementing a specialized carbon management platform.

Pattern will continue to evaluate additional metrics and KPIs relevant to climate risk management, such as metrics on physical risk exposure, insurance cost trends, and climate-related capital allocation.

GHG Emissions

Pattern discloses our annual enterprise greenhouse gas emissions in our Sustainability Report, using the operational control reporting boundary. We are strengthening our approach to measuring and managing GHG emissions by deploying a carbon management platform and enhancing internal guidance and protocols that support accurate calculations and regulatory compliance. Our GHG Inventory Management Plan documents our collection and verification approach, methodology, and controls.

We use energy consumption pulled from invoices to calculate our stationary combustion and purchased electricity for our offices and sites. This energy use supports the lighting, cooling, and heating needs of our corporate offices and operational facilities. Hard-to-abate emissions mainly arise from the fuel we purchase for backup generators at our operational facilities, which we use only when power from the electric grid is interrupted. We assess the GHG impacts of our vehicle fleet by analyzing mileage and fuel consumption.

Additionally, we determine value chain emissions related to the manufacturing of our equipment and project construction, focusing on Scope 3 categories 1 and 2. We also track business travel-related emissions under Scope 3, category 6.

Targets

We do not have formal GHG emission reduction targets. We are evaluating what targets may be feasible and appropriate for a company that operates renewable energy facilities. Our wind turbines and solar panels do not emit emissions to generate electricity, and our enterprise-wide carbon footprint is minimal compared to the emissions avoided through our clean energy production. In 2024, the clean energy produced by assets under Pattern's operational control avoided 6,580,236 metric tons of carbon dioxide equivalent (mtCO2e) on the electric grids in our jurisdictions.

Comparison of Our GHG Impacts (mt CO2e)

In 2024, our GHG Scope 1 & 2 emissions were less than 0.2% of the emissions displaced by our generation on the electric grid.

0.17%

Avoided Emissions[4]

Greenhouse Gas Emissions Categories[5]

GHG Scope 1
Direct emissions from sources we own or control, such as stationary backup generators at our facilities and our fleet vehicles.

GHG Scope 2
Indirect emissions from purchased electricity for heating and cooling our corporate and site offices and backfeed power when needed for turbines, substations, and switchyards.

GHG Scope 3
Indirect emissions associated with our value chain, including our purchased goods and services, capital procurement, and business travel.

[4] Avoided emissions are calculated based on Pattern's operational control boundary of the 2024 annual production from Pattern's operational utility-scale fleet. The calculations for our U.S. sites utilize the 2023 regional emission rates for onshore wind and utility PV in the U.S., as provided by the U.S. Environmental Protection Agency's Avoided Emissions and Generation Tool (AVERT). For our Canada sites, the 2021 regional emissions intensity of electricity generation is applied, as reported in Canada's National Inventory Report submitted to the United Nations Framework Convention on Climate Change.

[5] Greenhouse Gas Emissions were calculated in accordance with the Greenhouse Gas Protocol and based on Pattern's operational control of our North American utility-scale renewable energy business, including offices with more than one employee. Scope 1 includes our vehicle fleet and fuel purchased for heating and back up generators. Scope 2 reflects our purchased electricity and uses location-based methodology. Scope 3 includes categories 1, 2, and 6. Pattern uses the spend-based approach for Scope 3, categories 1 and 2 disclosures.

Pattern

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