

Task Force on Climate-Related Financial Disclosures (TCFD) Analysis

Governance and Risk Management

Scenario Analysis



Governance and Risk Management

Risk Identification and Assessment

Southern Star's Executive Leadership Team meets quarterly, and on an ad-hoc basis as necessary and briefs the Board on an array of topics including but not limited to physical and transition climate-related risks and opportunities.

These regularly scheduled meetings allow the board to observe measurable progress toward our goals (which includes emission reduction targets) and ensure Southern Star executes these goals via established benchmarking and climate focused policies and procedures. Additionally, the Board provides resources, strategic guidance and expected results towards climate-related risks that have the potential to affect the company.

Southern Star's Enterprise Risk Management (ERM) Program was created to protect and enhance shareholder value, while providing reasonable assurance that we are achieving the organization's vision and objectives. The ERM program is implemented with the understanding that risk-taking is necessary in the pursuit of value, and the program assists in the establishment of an appropriate balance between entrepreneurial activities (risk-taking behavior) and control activities (risk-avoidance behavior).

In addition to regular briefs to the board around climate and other corporate risk, Southern Star has an internal ERM Committee comprised of Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, Vice President Human Resources, General Counsel and Chief Compliance Officer (Chair).

The ERM Committee is responsible for supporting and driving the successful implementation of enterprise-wide risk management within Southern Star, including providing oversight, direction, and support for all ERM activities. The ERM Committee maintains ownership and responsibility for monitoring and managing corporate risk, including physical and transition climate-related risk and opportunity for the company. In 2023, Southern Star initiated the development of an internal Risk Office that reports to the ERM Committee and is chaired by the Manager of Compliance. The Risk Office is responsible for working across the organization to implement risk functions directed by the ERM Committee and to ensure continued day-to-day monitoring activities of corporate risk and control measures. The establishment of the new management-level Risk Office ensures there are established processes in place to identify, manage, and mitigate risks. The Risk Office aims to establish multi-disciplinary collaboration across all Southern Star departments to identify and mitigate high-level risks to the company. The Risk Office reports vertically through the Director of Legal and Compliance who reports to the Chief Compliance Officer and General Counsel.

Climate-related risk is also reported vertically through the Director of Land, Environmental & Sustainability to the Chief Operations Officer. The Director of Land, Environmental & Sustainability assumes responsibility for the oversight, communication of risk to the ERM Committee, development, design, and implementation of climate strategy in coordination with all other business divisions within the company. Additionally, the Director of Land, Environmental & Sustainability is tasked

to provide oversight and assessment of company operations regarding emission reductions, natural resource stewardship, and sustainability. These assessments are further refined through stakeholder coordination with subject matter experts to determine and implement innovative, real-world solutions throughout the company.

Company risks are identified and prioritized through an annual, collaborative effort of the Executive Leadership Team and the Company's third-party Internal Audit Team resulting in a Risk Register that considers gross risks, mitigation measures, net risks as well as analyses of the likelihood and magnitude of the various risks identified.

Through a multi-disciplinary collaboration across all departments within Southern Star, we are able to proactively plan and ensure day-to-day activities align with our climate strategy and company goals.

Additional mechanisms to identify risks include the Regulatory Risk Committee and the Methane Reduction and Emissions Team.

Risk Management

Southern Star's Regulatory Risk Committee and internal subject matter experts monitor existing and emerging regulations and requirements for the natural gas industry and work with the relevant Southern Star business groups to ensure compliance. The natural gas industry is highly regulated. Current climate regulations have had a direct impact industry-wide on resources and expansion of infrastructure, and commodity perception.

Southern Star leadership and individual contributors also hold multiple board, chair, co-chair, and committee seats within industry groups to monitor regulatory and climate-related issues such as: Interstate Pipeline Regulatory Committee, American Gas Association, Southern Gas Association, and the Interstate Natural Gas Association of America. Southern Star is also a member of ONE Future Coalition, an organization which tracks sector level methane intensity reductions, setting sector-wide reduction targets, and sharing best practices among peers. We believe in being part of the solution and providing feedback to the regulation making process. Through this involvement, we are able to provide regulators with real-world insight into the resulting effects of proposed legislation, and aid in the creation of meaningful policy.

Southern Star minimizes long-term climate risk from weather and temperature changes via our annual capital and modernization program. Our continuous improvement and modernization program positions our assets to perform under changes in weather conditions. Annual capital spent on evolving technologies, and research and development, further strengthens and

prepares our staff, and the system, to accommodate future energy transmission services to our customers potential for natural disasters are monitored on a daily basis via daily market demand reports and facility utilization projections. Additionally, we have specific response plans in place to address and respond to weather disasters such as wildfires, blizzards, and tornadoes. An example of this can be seen through our outstanding response to our customers during Winter Storm Uri in February 2021.

Governance and Risk Management

Risk Management (continued)

As further evidence of Southern Star's focus on reduction and preparedness of our system regarding climate-related initiatives and risk minimization:

- Southern Star's Project Engineering, Project Management, and Environmental team members meet during project planning to discuss opportunities for engineering out emissions and natural resources impacts related to projects. Internal gas venting thresholds have been established for required mitigation. Decisions on mitigation implementation center around site use, lateral line availability, cost benefit, and service requirements. Once all factors are evaluated, the teams decide the most practicable solution and implement the choice into project design. These costs are built into project budgets which roll up to our overall capital spend.
- In 2021, Southern Star installed a solar facility at our headquarters that houses approximately one third of our 620 team members. This project resulted in qualifying our headquarters facility as net zero for carbon-based electricity.
- In 2022 Southern Star devoted resources to two hydrogen pilot projects.
 - The first study was a groundbreaking Hydrogen/Natural Gas Fuel Pilot study, and the first of its kind to ever be conducted in the United States for a natural gas reciprocating engine in active transmission operation. This study evaluated the ability

of an essentially unmodified reciprocating compressor engine to run on a hydrogen natural gas mixture. Furthermore, this study was focused on evaluating the effects of blended fuel on engine combustion stability and emissions reductions realized under the co-fired strategy. This project helped minimize climate-based risk to Southern Star through the preparation of our system for a low carbon projected future

- The second study Southern Star funded in 2022 was a hydrogen pipeline readiness study that analyzed a 70-mile section of pipeline and all components (two compressor stations, meter facilities, multiple vintages of pipe, soft goods, and gas chromatography) compared to existing regulations, standards, and ground-breaking research to determine the needed upgrades to ensure readiness for a potential hydrogen-natural gas transition. Upon completion of this study, Southern Star will look to develop a comparative and representative model that can be applied to the remaining 5,730 miles of pipe across our system. This model would be applied through the use of artificial intelligence to the remainder of the system.

Southern Star remains engaged with our customers and the communities in which we serve. Public outreach and educational efforts across our footprint ensure our customers understand the benefits and broad uses of natural gas as a clean reliable energy source. Additionally, Southern Star proactively prepares our system annually to adapt to changing commodity needs and services. Our ability to be adaptive, innovative and in direct

communication with the needs of our customers allows us to continue to modernize our system ensuring we continue to provide our core business services of natural gas transmission and storage with the least negative environmental impact.

Through the utilization and adaptation of existing infrastructure, Southern Star is able to further minimize effects of climate change associated with greenfield infrastructure projects. The maximization of existing infrastructure will play a key role in efforts to decarbonize. Examples of this adaptation and innovation can be seen in our projects engaged in the development of the renewable natural gas (RNG) market, hydrogen research pilot projects, and other renewable or low carbon alternatives as market conditions allow. Southern Star continues to increase RNG interconnects and continues to partner with customers and alternative stakeholders on low carbon intensity energy transport opportunities across our system.

To manage methane emissions-related risk, Southern Star has implemented a robust methane emissions reduction program consisting of voluntary leak detection and repair program surveys completed at least once annually by all 43 of our compressor facilities.

Through these surveys, Southern Star has been able to develop a robust emissions inventory policies and procedures derived from the EPA's regulation Subpart W which only applies to five of Southern Star's 43 facilities; however, through our methane reduction program, we apply the same accepted regulatory survey requirements to all facilities. The program also reduces methane emissions by reducing venting

emissions during blowdown events using a tiered approach: (1) implementing natural gas drawdowns, (2) methane capture and recompression (or stoppage and bypass), (3) flaring, and as a last resort – (4) venting to atmosphere.

Southern Star continues to leverage the success and knowledge gained via the installation of our headquarters' solar field to evaluate additional renewable opportunities across our footprint to offset scope 1 and/or scope 2 greenhouse gas emissions. In 2024, Southern Star is undertaking a decarbonization study to evaluate other complimentary pathways for reducing scope 1 and 2 emissions.

Strategy

In 2023, Southern Star performed a TCFD aligned qualitative physical climate risk assessment of 60 of our assets including compressor stations, interconnects, a warehouse, and our headquarters. We evaluated present and future exposure in the 2030- and 2050-time horizons to acute and chronic physical climate hazards¹, specifically temperature changes, inland flooding, extreme temperatures, tropical cyclones, drought, and wildfire.

¹Acute hazards are event-driven (e.g., extreme weather events), while chronic hazards relate to longer-term shifts in climate conditions.

Scenario Analysis

Physical Climate Risk Assessment

Southern Star selected the Shared Socioeconomic Pathways (SSP) scenarios developed for use in the Sixth Intergovernmental Panel on Climate Change (IPCC) Assessment Report² to evaluate future climate conditions. For each scenario and time frame, physical risks across Southern Star assets were analyzed considering two dimensions: 1) physical exposure to the six climate hazards based on location, and 2) asset vulnerability to the physical impacts of those hazards based on type. A third-party consultant developed impact pathways specific to Southern Star to assess our vulnerability via an internal workshop that considered five different types of impact categories: environmental, capital costs, health and safety, operational disruption, and legal and reputation.

As a result of the physical climate-related risk assessment, we found that while physical climate hazards are projected to increase in risk level from 2030 to 2050 across all sites, reasonable and effective mitigation pathways are available to Southern Star.

²IPCC "Climate Change 2021 - The Physical Science Basis Summary for Policy Makers"

Physical Risks and Opportunities

Physical Risks and Opportunities

Physical Risk/ Opportunity	Potential Financial Impact	2030 Impact	2050 Impact	Mitigation
Extreme Temperatures	Equipment impact, operational slow-downs, worker fatigue, dehydration.	Moderate-High	High	• Backup power generation • Team member heat stress training • Team member heat stress relief
Inland Flooding	Equipment damage, environmental contamination, operational interruptions, safety risk, financial losses.	Moderate	Moderate	• Berming • Access route awareness • Stormwater Pollution Prevention Plans • Annual Flood Plan Review
Tropical Cyclones	Supply chain disruption, equipment and infrastructure damage, electrical out-ages, safety risk.	Low-Moderate	Low-Moderate	• Inclement weather warnings and shelter-in-place resources • Job Hazard Assessments • "AlertMedia" app for real-time team member notification
Drought	Minor operational disruptions, pipeline protection impacts, worker health and safety risk.	Negligible-Very Low	Negligible-Very Low	• Bottled water stored on site • Fire awareness training
Wildfire	Shutdown of assets and re-lated capital damage, environmental contamination, worker health and safety risk, extended service disruptions.	Negligible-Very High (<10 assets)	Negligible-Very High (<10 assets)	• Fuel load and critical area protection • Landscaping to minimize fuel load availability
Increasing Temperature (Chronic)	Increased operational and maintenance costs, equipment degradation, increased demand for natural gas power generation and related increased revenue.	Low-High	Low-High	• Solar field at headquarters to reduce dependency and lower cost • Planning additional solar

Scenario Analysis

Resilience

Subject matter experts and facility leaders at nine of our most at-risk and business-critical compressor stations along with our headquarters, were interviewed to assess the resilience and the ability of our assets to adapt to physical climate hazards. Findings indicated that our assets and processes have a relatively high level of adaptive capacity to physical climate hazards, indicative of our strong safety culture, with some additional resiliency recommendations identified. Extreme heat was identified as the most impactful physical hazard to our operations. Southern Star currently has robust measures in place to mitigate heat-related risks, including annual team member trainings on heat stress and frequent team member breaks in climate-controlled areas with hydration supplies. All Southern Star assets are also equipped with backup power generators that allow for continued operations in the event of power loss. Impacts from flooding and extreme storms were also identified. For assets where there is present-day exposure to flooding, Southern Star has implemented mitigation measures where feasible (e.g., berms have been built up to help prevent water from accessing, equipment is supported above flood elevation, and facility team members work with the local Emergency Response Personnel to identify alternate access routes in the event of flooded roads).

By assessing these physical climate-related hazards and determining which Southern Star assets are most at risk, we can adequately prepare, plan, and mitigate these risks to our operations in a world affected by climate change. Southern Star circulates and

implements findings from this information to facility planning staff and leadership to prioritize implementation of resiliency measures.

Transition Risk and Opportunity Assessment

In 2023 we also completed a TCFD-aligned climate-related transition risk and opportunity assessment to identify the risks and opportunities to our business as the world transitions to a low carbon economy. The scenario analysis conducted for the transition assessment relied on the assumptions and outputs of climate policy scenarios developed by the International Energy Agency's (IEA's) World Energy Outlook (WEO) and the Network of Central Banks and Supervisors for Greening the Financial System (NGFS). These scenarios explore different possible climate futures of how the world may transition to a low-carbon economy and the underlying assumptions and variables for how those possible futures would be achieved and the impact to our business.

Two scenarios, Stated Policies (STEPS) and Net Zero Emissions by 2050 (NZE), from the IEA's 2022 WEO were selected to assess the potential climate-related transition risks and opportunities to Southern Star's business and operations.³ From the NGFS, the disorderly Delayed Transition (DT) scenario was selected as a third forward-looking scenario in this assessment.

For each scenario and time horizon (current day, 2030 and 2050), we utilized stakeholder interviews to analyze future qualitative potential impacts on our operations, markets, supply chain, and associated effects on our revenues, cost, and expenditures. Similar to the physical

climate risk analysis, all identified risks and opportunities were qualitatively scored based on exposure (likelihood) as well as sensitivity (consequence) to our operations.

Transition opportunities were found to be the greatest under the NZE scenario, increasing from present-day through 2050. This scenario results in the most robust policy, regulatory, and market-driven changes in 2050 that pose high risk for us to comply with more stringent policies, but also an opportunity for us to facilitate and accommodate the transition to lower carbon energy sources as the U.S. energy transition and supporting governmental policies, incentives, and resources become more available.

In the NZE scenario most transition risks increased in severity from 2030 to 2050, representing increasing impacts if we do not mitigate or adapt to the changing economy and markets over time. While the 2030 risks under the STEPS scenario generally look similar to present day, by 2050, this scenario indicates physical impacts from climate change may drive greater stigmatization and reputational risks for us as a fossil-fuel transmission and storage company.

It is anticipated that Southern Star will continue to experience risks from mandates and regulation of our facilities under all scenarios and time frames. We can expect our industry to be tightly regulated regardless of what energy source is being transported in our pipeline. Under both DT and NZE scenarios, a rapid increase in investment and capital spending on clean power, renewable natural gas, and renewable hydrogen is projected. Because of

this, we have an opportunity to contribute to a transition to a lower carbon economy by developing and utilizing efficient, lower emissions intensity transmission and storage technologies across our operations while continuing to reliably and safely transport energy to our customers.

Scenario Analysis

Transition Risk Summary Table

Risk Category	Risk	Potential Financial Impact	Projected Impact*	Risk Reduction Strategies
Policy & Legal	Enhanced emissions and climate reporting obligations	OpEx increase from reporting compliance, possible legal fees for litigation or errors	Short-term: Low-Medium Medium-term: Low-Medium Long-term: Medium-High	• Scope 1 and 2 emissions tracking and reporting • ONE Future Coalition participation
	Mandates on and regulation of existing products and services	Increased OpEx and CapEx for regulatory compliance, indirect increased costs from suppliers	Short-term: High Medium-term: High Long-term: High	• Methane reduction goals • “Measure, Mitigate, and Modernize” emissions reduction strategy • High-bleed pneumatic device replacement • Research into innovative emissions reduction measures
	Exposure to litigation	Legal fees and judgments, decreased revenue due to reputational impact	Short-term: Low Medium-term: Low Long-term: Low-Medium	• Progress toward emissions goal • Engagement with public on natural gas safety and reliability campaigns
Technology	Transitioning to lower emissions energy technology (risk of unsuccessful investments)	Financial impact to assets, re-search and development costs, increase to CapEx and OpEx, sunk CapEx costs	Short-term: Medium Medium-term: Medium Long-term: Low	• Reducing venting • High bleed pneumatic device replacement • Research into innovative emissions reduction measures
Market	Changing customer demand	Loss of revenue, price volatility, decreased demand for fossil fuels, stranded assets	Short-term: Low Medium-term: Medium Long-term: High	• Stakeholder engagement • Climate change physical risk assessment • Investments in research and development (hydrogen applicability, electric compression) • Monitoring of low-emissions fuels • Renewable natural gas
Reputation	Stigmatization of the oil and natural gas sector	Decreased in-vestment, financial mobility, in-creasing insurance costs	Short-term: Medium Medium-term: Medium-High Long-term: High	• Climate-related physical and transition risk and opportunity assessment • Monitoring insurance rates • Team member engagement in operating communities • Public reliability and affordability campaigns

*Short-term/current day, Medium-term/2030, Long-term/2050)

Scenario Analysis

Transition Opportunity Summary Table

Category/ Opportunity	Key Opportunities	Potential Financial Impact	Projected Impact*	Opportunity Enhancement Strategies
Resource Efficiency Technology	Use of lower-emission and more efficient compression and transmission technologies	- Lower net carbon emissions and lower indirect carbon pricing - Prepare infrastructure for emerging regulations and potential for lower costs before demand for technologies rise	Short-term: Low Medium-term: Medium-high Long-term: High	- Methane emissions goals and “Measure, Mitigate, and Modernize” plan - Investigating electrifying compressor engines and turbines and carbon capture, storage and utilization, and separator vessel technology - Replacing high bleed pneumatic controllers
Energy Source	Use of lower-emission sources of energy for fleet	Lower net carbon emissions and associated carbon pricing costs, increased resiliency in energy sources	Short-term: Low Medium-term: Medium-High Long-term: High	Installing additional solar capacity
Products and Services	Development of new products and services through research and development, and innovation	Higher revenue and better competitive market position to reflect shifting consumer preferences	Short-term: Low-Medium Medium-term: Medium-High Long-term: High	- Investigating electrifying compressor engines and turbines and carbon capture, storage and utilization - Exploring hydrogen and RNG opportunities
Resilience	Building operational resilience in supply chain	- Increased resilience in supply chain and product/ commodity guarantees, resulting in cost stability - Avoided labor hours to find last-minute alternative suppliers	Short-term: Low-Medium Medium-term: Medium-High Long-term: High	- Creating a backstock of “off-the-shelf” products - Diversified supplier pool *Short-term/current day, Medium-term/2030, Long-term/2050)

The information and knowledge gained during the 2023 scenario analysis exercise will help Southern Star integrate climate considerations further into our business planning processes, risk management, and overall sustainability strategy.

Scenario Analysis

Metrics & Targets

Southern Star’s Board has driven the organization to develop, implement, and produce aggressive goals and targets that reduce climate-related impacts. These targets include:

- Reduce methane emissions by 50% by 2025 (from a 2020 baseline; complete); and
- Aspire to reach carbon neutrality by 2050

In 2019 and 2020 Southern Star completed the development of an emissions inventory based on the EPA Greenhouse Gas Reporting Rule. Upon establishment of a complete methane inventory, the Environmental Department sought counsel from a multi-disciplinary team to conduct a quantitative analysis of our methane inventory as well as opportunity assessments across our footprint. The analysis was used to establish our reduction target and evaluate it for applicability and viability. Post analysis, Southern Star staff elected to undertake a 50% reduction by 2025 target. When issued, Southern Star’s voluntary methane reduction program goal was the most aggressive known reduction target amongst our interstate mid-stream natural gas transmission and storage peers.

The success of our “Measure, Mitigate, and Modernize” focused program has more than doubled the projected 10% reduction year over year as we obtained our 50% reduced target one year ahead of schedule.

To ensure the integrity of our program and validate our results, Southern Star conducted a third-party audit in 2022 of its methane reduction plan and procedures, as well as its data and calculations. Audit results confirmed the integrity of our program with no material finding and a less than 0.04% deviation from the finalized annual methane emissions reported internally to the company and publicly through our annual [Sustainability Report](#).

Emissions reductions can be attributed to the application of our modernization program, strong maintenance practices, and reduction in pipeline blowdowns. Primary sources of reduction include pipeline and compressor station blowdown, condensate tank vents, and reciprocating compressor vent emissions.

Emissions are reported in the annual [Sustainability Report](#).