

SM|ENERGY

CDP CLIMATE
CHANGE
QUESTIONNAIRE 2021



SM Energy is pleased to participate in the 2021 CDP Climate Change Questionnaire.

Following investor engagement and discussions relating to environmental, social and governance (“ESG”) matters, it was determined that increased disclosure regarding ESG risk management and metrics would provide better insight to SM Energy’s sustainability business practices. Please note:

- **The Task Force on Climate related Financial Disclosures (TCFD) framework is attached to the CDP submittal and separately posted to the Company’s website; and**
- **SM Energy’s responses exclusively comprise 2020 results.**

FORWARD-LOOKING STATEMENTS

SM Energy’s responses to the CDP Climate Change Questionnaire contain “forward-looking statements” within the meaning of securities laws. Responses include discussion of potential future risks and opportunities, the Company’s planned processes for evaluating potential future risk, and certain plans, objectives, expectations and forecasts. These statements involve known and unknown risks, which may cause SM Energy’s actual results, plans, objectives, expectations and forecasts to differ materially from results, plans, objectives, expectations and forecasts expressed or implied by the forward-looking statements. Responses to the CDP Climate Change Questionnaire include descriptions of forward-looking risks and opportunities that employ third-party or other hypothetical scenarios that do not reflect or forecast the Company’s expectations for the future but rather provide certain potential implications to the Company’s plans, quantifiable and non-quantifiable, under such hypothetical circumstances. All statements, other than statements of historical fact, included in the CDP Climate Change Questionnaire are subject to assumptions, risks and uncertainties that are beyond our control. Future results, plans, objectives, expectations and forecasts may be impacted by the risks discussed in the Risk Factors section of SM Energy’s most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q or other filings with the SEC. The forward-looking statements contained herein speak as of the date of this questionnaire. Although SM Energy may from time to time voluntarily update its prior forward-looking statements, it disclaims any commitment to do so, except as required by securities laws.

Welcome to your CDP Climate Change Questionnaire 2021

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

SM Energy Company ("SM Energy" or the "Company") is an independent energy company engaged in the acquisition, exploration, development, and production of crude oil, natural gas, and natural gas liquids. Founded in 1908, SM Energy, a Delaware corporation, has been publicly traded on the New York Stock Exchange (NYSE) since 2002, under the ticker symbol SM. SM Energy operations are located onshore in the United States in two main operating areas: the Midland Basin in West Texas, and the Maverick Basin in South Texas. Proved reserves are balanced among the Company's two operating areas, with a total of approximately 405 million barrels of oil equivalent (Boe) at the end of 2020. In 2020, the Company reported full year sales volumes of 127 thousand barrels of oil equivalent per day, consisting of 50% crude oil, 37% natural gas, and 13% natural gas liquids. The core values of integrity and ethical behavior are the pillars of our culture, and as a result, the health and safety of our employees and contractors is our highest priority. All employees are responsible for upholding Company-wide standards and values. We have many long-standing policies designed to promote ethical conduct and integrity, that employees are required to read and acknowledge on an annual basis. Employees are consistently provided training opportunities to develop skills in leadership, safety, and technical acumen, which help strengthen our efforts in conducting business with high ethical standards. Our purpose is to make people's lives better by responsibly producing energy supplies, contributing to domestic energy security and prosperity, and having a positive impact in the communities where we live and work. For more information about SM Energy, please visit www.sm-energy.com.

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Company’s plans, quantifiable and non-quantifiable, under such hypothetical circumstances. All statements, other than statements of historical fact, included in the CDP Climate Change Questionnaire are subject to assumptions, risks and uncertainties that are beyond our control. Future results, plans, objectives, expectations and forecasts may be impacted by the risks discussed in the Risk Factors section of SM Energy's most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q or other filings with the SEC. The forward-looking statements contained herein speak as of the date of this questionnaire. Although SM Energy may from time to time voluntarily update its prior forward-looking statements, it disclaims any commitment to do so, except as required by securities laws.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Reporting year	January 1, 2020	December 31, 2020	No

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-OG0.7

(C-OG0.7) Which part of the oil and gas value chain and other areas does your organization operate in?

Row 1

Oil and gas value chain

Upstream

Other divisions

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level committee	<p>SM Energy's Environmental, Social and Governance Committee ("ESG Committee") of its Board of Directors ("Board") is charged with oversight of climate-related issues. The ESG Committee reviews and assesses the effectiveness of the Company's ESG initiatives, and monitors, responds to, and makes recommendations regarding ESG-related trends and emerging issues, including climate-related risks and opportunities, and stockholder proposals. The ESG Committee regularly reports to the full Board with updates, recommendations and proposals. During 2020, the ESG Committee decided to engage a third-party to perform a scenario analysis using the IEA Sustainable Development Scenario to better understand the impacts of a possible carbon-constrained future, and further, made the decision to engage an outside firm to perform the verification of reported Scope 1 emissions. In addition, our CEO, who is a member of the Board of Directors, is a member of our management ESG Committee and directs management's efforts and responsibilities for climate-related issues.</p> <p>The charter of our ESG Committee can be accessed at: sm-energy.com/about-us/governance.</p>

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding strategy	SM Energy's ESG Committee meets on a regular basis and is charged with, among other things, oversight of climate-related issues.

	<p>Reviewing and guiding major plans of action</p> <p>Reviewing and guiding risk management policies</p> <p>Reviewing and guiding annual budgets</p> <p>Reviewing and guiding business plans</p> <p>Setting performance objectives</p> <p>Monitoring implementation and performance of objectives</p> <p>Overseeing major capital expenditures, acquisitions and divestitures</p> <p>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</p>	<p>The Board periodically reviews internally created dashboards that monitor relevant ESG topics and initiatives.</p> <p>The ESG Committee will review and assess the effectiveness of the Company's ESG initiatives, as well as monitor, respond to, and make recommendations regarding ESG-related trends, emerging issues, including climate-related risks and opportunities, and stockholder proposals. The Committee regularly reviews the Company's status with respect to federal, state, and local regulations for air emissions, water, wildlife, spill reporting, safety, and general operations. The Committee also regularly reviews disclosure practices, peer benchmarking of ESG metrics, and changing technologies and practices that have the potential to improve the Company's overall ESG strategy and performance.</p> <p>The ESG Committee engages with the full Board of Directors specifically on climate-related disclosure, strategy/planning and ESG performance-based compensation practices.</p> <p>In order to provide support for the Company's ongoing efforts in ESG matters, the Company established a Management ESG Committee in 2020 consisting of certain members of management, including the President and CEO, CFO and Treasurer, General Counsel and corporate officers who lead HR, EHS, Operations, and Investor Relations.</p>
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C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	Quarterly

Chief Financial Officer (CFO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify General Counsel	Both assessing and managing climate-related risks and opportunities	Quarterly
Other committee, please specify Management ESG Committee	Assessing climate-related risks and opportunities	More frequently than quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The Management ESG Committee includes the President and CEO, CFO and Treasurer, General Counsel and corporate officers who lead Human Resources, EHS, operations, and Investor Relations. The Company's strategy is to be a premier operator of top tier assets which includes top quartile performance on climate-related metrics. By including representatives from all key areas of the Company, the Management ESG Committee ensures a coordinated, Company-wide approach. The importance of ESG performance is well-integrated across operations, planning, technology, reporting and human resources. The Company's President and CEO is the most senior member of the leadership team responsible for the Company's overall climate-related strategy, performance and management of climate-related risks and opportunities. The President and CEO is also a member of the Board of Directors, reporting to the Board of Directors on climate-related matters.

The President and CEO, CFO and Treasurer, and General Counsel, along with members of the Management ESG Committee, recognize the importance of collaboration and integration of ESG across the organization and each are actively engaged with:

- regularly reviewing the Company's performance versus targets for air emissions and water stewardship;
- participating in the Company's climate-related disclosure practices including participation in and review of CDP disclosure;
- ensuring accuracy of disclosures;
- engaging with investors on climate-related issues;
- incorporating risk assessment and ESG strategy into financial and operational plans;
- tying employee compensation to ESG performance, including emissions and spill metrics;
- encouraging and solving for technical and operational changes that improve climate-related performance; and
- developing governance practices responsive to climate-related issues.

Members of the Management ESG Committee report monthly to the senior management team (including the executive team) and to the ESG Committee regarding environmental

performance, status of major initiatives, and to discuss strategy with respect to climate related risks and opportunities. The first priority at all monthly senior management meetings is to review internal dashboards including (1) Air Emissions and (2) Water Stewardship. The air emissions dashboard covers GHG emissions intensity, methane emissions rate, and leak detection and repair. The water stewardship dashboard includes metrics on fresh water used, disposal rates and spilled water. These dashboards are provided in conjunction with dashboards for safety metrics and human capital. The dashboards are available to operating personnel on a daily basis and used for monitoring and mitigation.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
All employees	Monetary reward	Emissions reduction target	SM Energy's 2020 short-term compensation program for all employees was tied to environmental and safety targets, including air emissions (specifically greenhouse gas intensity and methane intensity), as well as spill volumes per 1,000 barrels produced and total recordable incident rate (TRIR). The goal with respect to these metrics was to achieve top quartile performance compared to reporting American Exploration and Production Council ("AXPC") members based on the trailing three-year average of survey responses and publicly available data from AXPC members. Additionally, short-term incentive compensation for 2020 was tied to the completion of a triennial EHS compliance audit and for putting systems in place to track broader ESG metrics to enable increased reporting in the future and increased employee awareness.
Management group	Monetary reward	Emissions reduction target	SM Energy's performance-based long-term incentive compensation grants that were made to the executive team and qualifying employees in 2020 were based in part on ESG performance metrics for emissions, safety and spills. The weighting of these ESG metrics constituted 20% of the overall award, with one-half of

			<p>the ESG target tied to a reduction in GHG emissions intensity over the three-year program period from the base year 2019. The remainder is tied to employee and contractor safety as measured by TRIR and spill volume rates.</p>
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	<p>SM Energy's 2020 short-term compensation program for our CEO was tied to environmental and safety targets, including air emissions, specifically greenhouse gas intensity and methane intensity, as well as spill volumes per 1,000 barrels produced and total recordable incident rate (TRIR). The goal with respect to these metrics was to achieve top quartile performance compared to reporting AXPC members based on the trailing three-year average of survey responses and publicly available data from American Exploration & Production Council members. Additionally, short-term incentive compensation for 2020 was tied to the completion of a triennial EHS compliance audit and for putting systems in place to track broader ESG metrics to enable increased reporting in the future and increased employee awareness.</p> <p>For the CEO, SM Energy's performance-based long-term incentive compensation grants that were made in 2020 were based in part on ESG performance metrics for emissions, safety and spills. The weighting of these ESG metrics constituted 20% of the overall award, with one-half of the ESG target tied to a reduction in GHG emissions intensity over the three-year program period from the base year 2019. The remainder is tied to employee and contractor safety as measured by TRIR and spill volume rates.</p>
Chief Financial Officer (CFO)	Monetary reward	Emissions reduction target	<p>SM Energy's 2020 short-term compensation program for our CFO was tied to environmental and safety targets, including air emissions, specifically greenhouse gas intensity and methane intensity, as well as spill volumes per 1,000 barrels produced and total recordable incident rate (TRIR). The goal with respect to these metrics was to achieve top quartile performance compared to reporting AXPC members based on the trailing three-year average of survey responses and publicly available data from American Exploration & Production Council members. Additionally, short-term incentive compensation for 2020 was tied to the completion of a triennial EHS compliance audit and for putting systems in place to track broader ESG metrics</p>

		<p>to enable increased reporting in the future and increased employee awareness.</p> <p>For the CFO, SM Energy’s performance-based long-term incentive compensation grants that were made in 2020 were based in part on ESG performance metrics for emissions, safety and spills. The weighting of these ESG metrics constituted 20% of the overall award, with one-half of the ESG target tied to a reduction in GHG emissions intensity over the three-year program period from the base year 2019. The remainder is tied to employee and contractor safety as measured by TRIR and spill volume rates.</p>
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C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	2	Short term: Our detailed corporate business plan focuses on a one to two-year time horizon intended to specifically provide a detailed operating plan that supports our long-term strategy and objectives. During this timeframe, SM Energy evaluates potential climate-related risks and opportunities that could have either short-term or long-term impacts, such as risks related to flaring restrictions and projects to reduce air emissions.
Medium-term	2	5	Medium term: Our long-range plan (LRP) is a five-year plan and corresponds with the SEC timeline for developing the Company’s proved oil and natural gas reserves and also supports achieving our long-term objectives. Key risks evaluated during this time period include the potential for regulation related to a carbon pricing mechanism and greenhouse gas (GHG) emissions limits.
Long-term	5	25	Long-term: The Company considers its long-term sustainability over 10-25 years, which incorporates field life, reserve replacement, enterprise value assessments and sets the course for long-term

			sustainability objectives. Long-term risks and opportunities are evaluated over 10 years and incorporated into scenario analyses, that consider factors such as government policy, technology impacts, access to new markets, and alternative energy sources that affect supply and demand for oil and gas.
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C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

The Company manages broad business risks in conformance with an Enterprise Risk Management (ERM) policy. Risk Impact is graded into five categories from minimal to major, with an assigned dollar value range based on the expected impact to EBITDAX and equity value for each category. ESG associated risks can lead to ancillary financial or equity value impacts due to negative effects on reputation. The Enterprise Risk Management (ERM) committee evaluates, monitors, and mitigates (where possible) those risks by appointing risk owners who define the active risk mitigation strategies, and the approach used to monitor risk activity. Emerging risks and trends are also considered. The top ranked risks are reviewed at the Committee’s periodic meetings along with a presentation provided by a selected risk owner discussing their risk evaluation metrics and currently employed risk mitigation strategies. Top ranked risks are annually reviewed by the Board in conjunction with a report from Internal Audit who reviews the ERM processes. The report verifies the ERM Committee properly monitors and addresses existing and emerging risks and trends facing the Company and that the appropriate people, processes, and systems are in place to manage such risks. The Board annually reviews the Company’s risk management philosophy and practices. The Board also considers potential risks to the Company’s strategic initiatives.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

- Direct operations
- Upstream
- Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

- Short-term
- Medium-term

Long-term

Description of process

Climate-related risks and opportunities are considered as part of our Enterprise Risk Management (ERM) Policy. The ERM Policy, in conjunction with the Company's ERM Committee, sets forth a process whereby risks are identified, assessed, and reviewed in consideration of the likelihood of the risk to occur, the potential impact of the risk and the timeframe of the risk. The risk process incorporates risks disclosed in the Risk Factors section of SM Energy Company's Form 10-K SEC filing, as well as considers potentially relevant risk factors disclosed in peer company's Form 10-K SEC filings, emerging risks discussed in the World Economic Forum's annual Global Risk Report and other potential risks associated with ESG policies. Risk Impact is graded into five categories from minimal to major, with an assigned dollar value range based on the expected impact to EBITDAX and equity value for each category. ESG associated risk dependencies can lead to ancillary financial impacts due to reputation destruction resulting in equity value impacts. The ERM committee evaluates, monitors, and mitigates (where possible) those risks by appointing risk owners who define the active risk mitigation strategies, and the approach used to monitor risk activity. Emerging risks and trends are also considered. The top ranked risks are reviewed at the Committee's periodic meetings along with a presentation provided by a selected risk owner discussing their risk evaluation metrics and currently employed risk mitigation strategies. Top ranked risks are annually reviewed by the Board in conjunction with a report from Internal Audit who reviews the ERM processes. The report verifies the ERM Committee properly monitors and addresses existing and emerging risks and trends facing the Company and that the appropriate people, processes, and systems are in place to manage such risks. The Board annually reviews the Company's risk management philosophy and practices. The Board also considers potential risks to the Company's strategic initiatives as part of this process.

SM Energy has a Management ESG Committee consisting of certain members of management including the General Counsel and corporate officers who lead HR, EHS, operations and Investor Relations. This multi-disciplinary team works closely to identify, monitor, and evaluate environmental-related policy, regulatory, and legislative risks in the United States. Members of the ERM Committee are also on the Management ESG Committee. The Management ESG Committee meets regularly and reports to the ESG Committee quarterly regarding environmental performance, status of major initiatives, and to discuss strategy related to climate related risks and opportunities. SM Energy's annual risk assessment considers emerging regulations, such as carbon pricing mechanisms and emission control requirements, and models the impact.

TRANSITION RISK

Climate-related risks are considered within the framework of the ERM process. The Company's ESG Committee and Management ESG Committee review and evaluate a wide range of topics that present potential transitional risks and opportunities. (Situation) An example of a transition risk identified in 2020 relates to the increasing likelihood that a carbon pricing mechanism will be implemented in the United States. (Task/Action) While the form and cost of new regulations are unknown, the Company considered

hypothetical scenarios in its financial and operational business planning process to consider a range of effects from a carbon pricing mechanism. Collaboration across departments including operations, EHS/regulatory, ESG and corporate planning combined to develop potential pricing, timing and calculations to feed various scenarios to evaluate the potential impact of this emerging regulation. These results were then reviewed with the Board of Directors during the Company’s normal strategy and planning process. (Result) As a result of this analysis, it was determined that, due to the strong operating margin of SM Energy’s assets as projected in long-term plans and based on the results of the hypothetical scenarios considered to date, the Company would be able to absorb the additional cost and maintain profitability. In addition, the decision was made to elevate the analysis of this risk by employing IEA SDS scenario analysis assumptions, which consider annually increasing carbon emissions costs and a longer time frame. The results and potential action items resulting from this analysis are currently being reviewed by Management.

PHYSICAL RISK

Climate-related risks are considered within the framework of the ERM process. The Company’s ESG Committee and Management ESG Committee review and evaluate topics that present potential physical risks and opportunities. For managing physical risks, the Company maintains an emergency response plan that details procedures for emergency scenarios. Potential scenarios include weather events that could have a material impact on our operations, such as extreme cold. The Company has tested its capability in this scenario through its operating experience in North Dakota. Its successful experience gives it confidence in managing extreme cold in future scenarios. SM Energy does not foresee physical risk due to climate change affecting our business any more than the current environment in either the short, medium, or long-term time frames. Oil and gas extraction operations have been successful in extreme environments around the world and we are confident in our ability to continue operating during those time frames.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	The Company meets or exceeds current regulations and applicable laws and has established programs to monitor compliance. For example, in regard to the EPA’s regulation New Source Performance Standards (NSPS) Subpart OOOO, the Company had adopted, prior to the regulation, a proactive approach to using intermittent or low-bleed gas pneumatics on many of our facilities. We have converted certain pneumatic devices to operate on a compressed instrument air system, which replaces the pressurized natural gas with atmospheric air, eliminating methane emissions. These systems have been installed at new facilities in our Midland Basin Region since 2017. In

		<p>our South Texas Region, we are replacing gas pneumatic devices with solar and wind powered electronic controllers. Also, in regard to EPA regulations, we utilize various techniques across our operations to monitor fugitive emissions, including audio/ visual/olfactory inspections (AVO) and optical gas imaging (OGI) cameras. Since 2017, we have employed a leak detection and repair (LDAR) program at all new facilities in accordance with EPA’s NSPS OOOOa rules. In addition, we often undertake voluntary efforts that exceed regulatory requirements, such as our use of an OGI cameras to conduct LDAR as part of our maintenance program in both our Midland and South Texas assets. The foregoing discussion is subject to and supplemented by the “Risk Factor” sections of the Company’s Form 10-K and other regulatory filings.</p>
Emerging regulation	Relevant, always included	<p>Risks related to emerging regulations are considered by the Company and reviewed by the Board of Directors on a regular basis. The Company regularly models numerous regional and macro-level scenarios, including potential changes in regulations. As emerging regulations are identified, they are reviewed for potential impacts on SM Energy 's operations, finances, and capital plans. For example, the potential for increased regulation of methane emissions through flaring is a key topic across oil and gas production basins. SM Energy seeks to minimize flaring by establishing appropriate targets, developing and installing the appropriate monitoring tools and facilities, and training personnel to support these goals. The Company has established flaring goals and monitors daily operational data that provides operations management with the information needed to identify root causes to implement appropriate actions. Actions have included notifying and working with our midstream gas purchasers to identify and install gas off-loads to other purchasers, de-bottle necking and optimizing pipelines and equipment, and rescheduling capital expenditures in order to allow infrastructure to catch-up with development, thus eliminating or minimizing flaring. The foregoing discussion is subject to and supplemented by the “Risk Factor” sections of the Company’s Form 10-K and other regulatory filings.</p>
Technology	Relevant, always included	<p>Risks related to technology are considered by the Company and reviewed by the Board of Directors on a regular basis. SM Energy seeks to implement appropriate technologies in its business. In general, innovation, data, and technologies are applied in our efforts to mitigate environmental impacts on an ongoing basis. With respect to air emissions, examples of such innovation, applied data and new technologies include: development of our dashboard that tracks and monitors emissions; implementation of vapor recovery technology; controller equipment upgrades; and application of LDAR. For land protection it includes: collection of LIDAR and aerial imagery data; implementation of spill prevention and expanded recycling. With</p>

		respect to water protection: implementation of water management systems, including construction of facilities for the recycling and disposal of produced water. The foregoing discussion is subject to and supplemented by the “Risk Factor” sections of the Company’s Form 10-K and other regulatory filings.
Legal	Relevant, always included	Climate-related legal risks could include, but not be limited to, the potential for increased litigation involving climate-related laws or regulations and the Company’s disclosures concerning climate-related matters. Federal, state, and local authorities regulate the oil and gas industry. Legislation and regulations affecting the industry are often amended or supplemented. SM Energy is in substantial compliance with applicable Texas and federal GHG and methane regulatory requirements. The foregoing discussion is subject to and supplemented by the “Risk Factor” sections of the Company’s Form 10-K and other regulatory filings.
Market	Relevant, always included	Risks related to changing market conditions are considered by the Company and reviewed by the Board of Directors on a regular basis. SM Energy’s financial results and the value of its properties are dependent on the supply and demand for oil, natural gas, and NGLs, which impact the realized price we realize for these commodities. We expect market prices and our resulting realized price to be volatile in the future due to factors beyond our control, including, but not limited to, availability of alternative energy sources and technological advances (e.g. electric cars). SM Energy believes that climate-related transition risks are likely to result in changes in demand for, or pricing of, oil, gas and NGLs. The foregoing discussion is subject to and supplemented by the “Risk Factor” sections of the Company’s Form 10-K and other regulatory filings.
Reputation	Relevant, always included	Certain segments of the public, the business community, and the investment community, have developed negative sentiment towards the oil and gas industry. Equity returns in the sector versus other industry sectors have led to lower oil and gas representation in certain key equity market indices. In addition, some investors, including investment management firms, sovereign wealth and pension funds, university endowments and other investment advisors, have adopted policies to discontinue or reduce their investments in the oil and gas sector based on social and environmental considerations. Furthermore, other influential stakeholders have pressured commercial and investment banks and other service providers to cease doing business with the oil and gas industry, including to reduce or cease financing of oil and gas companies and related infrastructure projects. The foregoing discussion is subject to and supplemented by the “Risk Factor” sections of the Company’s Form 10-K and other regulatory filings.

Acute physical	Not relevant, explanation provided	SM Energy does not foresee acute physical risk due to climate change impacting our business any more than the current environment in either the short, medium, or long-term time frames. Oil and gas extraction operations have been successful in some of the most extreme environments worldwide, and SM Energy is confident in its ability to continue to operate in the areas where it currently operates for the short, medium, and long-term time frames. The foregoing discussion is subject to and supplemented by the “Risk Factor” sections of the Company’s Form 10-K and other regulatory filings.
Chronic physical	Not relevant, explanation provided	SM Energy does not foresee chronic physical risk due to climate change impacting our business any more than the current environment in either the short, medium, or long-term time frames. Oil and gas extraction operations have been successful in some of the most extreme environments worldwide, and SM Energy is confident in its ability to continue to operate in the areas where it currently operates for the short, medium, and long-term time frames. The foregoing discussion is subject to and supplemented by the “Risk Factor” sections of the Company’s Form 10-K and other regulatory filings.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Upstream

Risk type & Primary climate-related risk driver

Emerging regulation
Carbon pricing mechanisms

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

SM Energy considered the potential for the imposition of a carbon pricing system in 2020 as part of its normal planning and strategy process. Although the Company is not currently affected by regulated pricing on emissions, we believe that it is possible that such a carbon pricing mechanism could be implemented. The Company applied a \$30 per metric ton carbon price to projected emissions over the five-year plan 2021 - 2025. That analysis, and other reasons, led to the decision to expand the carbon pricing scenario analysis to include a longer period of time and comparable metrics. We chose to apply the IEA 2020 WEO Sustainable Development Scenario (SDS) recommended carbon pricing, thus expanded the time period to 2030 and employed only the SDS recommended carbon pricing that starts at \$63.00 per metric ton in 2025 and escalates to \$88.67 in 2030. The imposition of a carbon pricing mechanism on Scope 1 and 2 emissions would increase costs and negatively affect profitability. The IEA SDS suggests a \$63 per metric ton carbon price in 2025 and \$140 by 2040 (in 2019 dollars). These IEA SDS carbon prices were applied to SM Energy's internal forecast for scope 1 and 2 GHG emissions from 2025 - 2030, which range from approximately 315,000 - 581,000 mT CO₂e per year.

Time horizon

Medium-term

Likelihood

Unlikely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

18,000,000

Potential financial impact figure – maximum (currency)

19,000,000

Explanation of financial impact figure

SM Energy considered the potential for the imposition of a carbon pricing system in 2020 as part of its normal planning and strategy process. Although the Company is not currently affected by regulated pricing on emissions, we believe that it is possible that such a carbon pricing mechanism could be implemented. The Company applied a \$30 per metric ton carbon price to projected Scope 1 and 2 emissions over the five-year plan 2021 - 2025, where emissions ranged from 581,000 - 688,000 mT CO₂e per year. This resulted in a financial impact of approximately \$18 million per year undiscounted.

The internal analysis mentioned above, along with other reasons, led to the decision to expand the carbon pricing scenario analysis to include a longer period of time and

comparable metrics. We chose to apply the IEA 2020 WEO Sustainable Development Scenario (SDS) recommended carbon pricing, thus expanded the time period to 2030 and employed only the SDS recommended carbon pricing that starts at \$63.00 per metric ton in 2025 and escalates to \$88.67 in 2030. In calculating this maximum financial impact figure, we applied the carbon price indicated from IEA's SDS scenario from 2025 - 2030 to its projected Scope 1 and 2 emissions, which range from approximately 315,000 - 581,000 mT CO₂e per year during that time period. Based on this approach, the potential financial impact of this risk would average approximately \$19 million per year undiscounted from 2021 - 2030.

The resulting impact from each scenario had a similar financial impact. The financial impact calculated was based on the Company's base plan and did not take into account changes in capital allocation or application of new technologies, which would offset the outcome in an actual corporate plan scenario. In reality, the figures used by the current Administration for the Social Cost of Carbon indicator in regulatory analysis are significantly lower than the IEA SDS figures but SM Energy modeled the potential impact of a 'well below 2C scenario' per TCFD guidance. The IEA SDS scenario is highly speculative, and many observers would say unlikely, that the US will impose a carbon tax equal to the IEA SDS levels.

Cost of response to risk

0

Description of response and explanation of cost calculation

As part of its normal planning and strategy process, in 2020 SM Energy modeled the financial impact of carbon pricing mechanisms using a wide range of potential pricing scenarios. While we believe our high quality inventory would be able to absorb the additional cost and sustain profitability, we also consider certain strategies that would mitigate this risk. For example, the emissions profile of our two operating areas are significantly different. This allows us to allocate the timing of capital in a way that could mitigate the impact from a carbon pricing mechanism. The cost of the response to the risk is estimated at \$0. There is no incremental cost to respond to this climate related risk mitigation response because our two operating areas provide similar financial returns under currently assumed future commodity prices.

SM Energy's efforts to improve the carbon intensity of its operations would be beneficial in reducing the impact of carbon pricing mechanisms. Measures to reduce emissions and thus reduce the burden of carbon pricing mechanisms could entail expanded application of existing technologies such as LDAR and other monitoring, additional pipeline interconnections, expected development of new technologies over the coming decade and other actions that have not yet been analyzed in detail.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation

Mandates on and regulation of existing products and services

Primary potential financial impact

Decreased revenues due to reduced production capacity

Company-specific description

Reinstitution or institution of methane regulations or flaring limitations could adversely affect SM Energy's revenues in the short-term by increasing costs related to methane management entailing increased well downtime or some resources having to be shut-in. The modeling approach estimated additional well downtime (i.e. 1%) and calculated the reduction in revenue relating to such downtime.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,000,000

Potential financial impact figure – minimum (currency)**Potential financial impact figure – maximum (currency)****Explanation of financial impact figure**

If a stricter methane reduction mandate were imposed, it could result in lower revenue if the Company needed to curtail production. Mandates based on a company-specific baseline could present compliance difficulties as it would be challenging to reduce already low emission rates. SM energy reported 2020 methane intensity for Scope 1 is already lower than the IEA SDS protocol level projected for 2030. If midstream pipelines are not available and flaring is not allowed, wells will have to be shut-in. Routine flaring and venting could be phased out over time and we estimate additional well downtime (i.e. 1%) and calculate the reduction in revenue relating to the downtime.

The potential impact of this risk was modeled for 2022 to 2030. It resulted in a decrease in revenue (due to increase in well downtime) estimated to range up to approximately \$3 million per year, undiscounted, for the years 2021 -2030 based on the scenario assumptions described for modeling the impact of this risk.

Cost of response to risk

0

Description of response and explanation of cost calculation

The metric for the analysis was the cost of potential well downtime under the assumed impact of increased regulation of methane emissions. Additional costs could arise related to the infrastructure required to support less flaring. As indicated, the response may involve additional well shut-ins or investing in alternative uses of associated gas on site or contracting with additional companies with gathering infrastructure.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Market

Changing customer behavior

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

As an oil and gas producer, SM Energy is vulnerable to projected long-term declines in hydrocarbon demand. The 2020 IEA SDS projects a 34% global decrease in oil demand by 2040. Oil demand in Organization for Economic Co-operation and Development countries decreases at a greater rate than developing countries due a combination of factors, including a more aggressive deployment of electric vehicles. The IEA SDS also projects global natural gas demand to increase 8% between 2019 and 2028, before declining to reach an overall demand decrease of 2.5% by 2040. These figures for changes in oil and gas demand in the IEA SDS were used as the basis for Risk 3 impact modeling.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)**Potential financial impact figure – minimum (currency)**

200,000

Potential financial impact figure – maximum (currency)

27,000,000

Explanation of financial impact figure

In calculating the financial impact of this risk, SM Energy applied commodity prices from the IEA SDS scenario as commodity prices inherently reflect supply and demand changes and imbalances. The Company calculated the minimum financial impact by employing budget pricing from 2021 - 2025 and carrying the 2025 budget pricing forward through 2030. The revenue generated using this price scenario was compared to a price scenario that employed strip pricing from 2021 - 2024 and SDS pricing from 2025 - 2030 (as the IEA SDS does not provide pricing prior to 2025). The minimum potential impact of this risk using this modeling approach is an approximate decrease in revenue of \$200,000 per year, undiscounted, from 2021 - 2030.

In calculating the maximum financial impact, the Company employed strip pricing from 2021 - 2024 and IEA SDS pricing from 2025 - 2030 (as the IEA SDS does not provide pricing prior to 2025). The revenue generated using this price scenario was compared to a price scenario that employed strip pricing for the entire ten-year period from 2021 - 2030. The maximum potential impact of this risk using this modeling approach is approximately \$27 million undiscounted decrease in revenue per year from 2021 - 2030.

The impact calculated was based on the Company's base plan and did not take into account changes in capital allocation or application of new technologies, which would offset the outcome in an actual corporate plan scenario.

Many observers see global oil and gas demand rebounding after the COVID-19 pandemic, so the main driver behind this risk is the assumption that climate-related policy actions such as mandated fuel switching or fossil fuel surcharges, consumer behavior that reduces consumption levels and market penetration of EVs/alternate fuels under this IEA scenario leading to the sort of demand changes suggested. Medium likelihood would assume strong and widespread adoption of such policy measures. Low likelihood would suggest less strong and less widespread adoption.

Cost of response to risk

0

Description of response and explanation of cost calculation

SM Energy is already a low-cost, highly competitive producer. Every effort would be made to keep lifting costs low and find added cost reduction opportunities but specific actions to do so were not calculated or modeled in this scenario.

SM Energy regularly models the financial impact of significant reductions in oil and gas prices using a wide range of potential pricing scenarios. While a significant reduction in oil and gas prices could have a material impact on our profitability, we do consider certain strategies that would mitigate this risk. For example, our year-end 2020 proved reserves on an energy equivalent basis are approximately evenly split between oil and gas. This allows us to allocate capital to take advantage of differences in commodity pricing. The cost of the response to the risk is estimated at \$0. There is no incremental cost to respond to this climate related risk mitigation response because our two operating areas provide similar financial returns.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Markets

Primary climate-related opportunity driver

Access to new markets

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

In support of a less than 2 degree climate-change pathway, rapid de-carbonization of global power supply is expected to result in increased LNG demand for export from the U.S. in order to meet future power sector demand, particularly as a substitute for coal or fuel oil-fired electricity, or for new capacity in areas that rely on harmful biomass fuels.

Macro-economic analysis of increased LNG export capacity from the Gulf Coast estimates a 6 Bcf/d increase would result in a \$0.10-0.22/MMBtu increase in Henry Hub prices, depending upon proximity to the Gulf. SM Energy's operations in the Permian and Maverick basins are well located and already connected to pipelines which can supply existing liquefaction plants that service overseas LNG markets.

For this opportunity, SM Energy assumes a \$0.10-\$0.22 price increase on natural gas production for the plan period 2023-2030 as a result of this scenario.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

8,300,000

Potential financial impact figure – maximum (currency)

18,300,000

Explanation of financial impact figure

The result of this modeling range provides an expected benefit to our base plan between \$8.3 million and \$18.3 million per year, undiscounted. These figures represent the per year financial impact over the ten-year period 2021 - 2030.

There is a Medium to High likelihood that LNG exports from the Gulf of Mexico will grow in a climate-aware world.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

The transition to a lower carbon economy presents an opportunity for increased LNG exports from the U.S.. Gulf Coast to substitute on a global scale for coal or fuel oil-fired electricity, or for new capacity in areas that rely on harmful biomass fuels. Substituting natural gas for coal or more carbon intensive fuels is an important component of the clean energy transition. New markets for LNG offer an opportunity for SM Energy to provide lower-emission products, which are differentiated in the market. Because of the anticipated strong demand for LNG, and the geographic location of our assets, the incremental costs to realize this opportunity are estimated at \$0.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of new technologies

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

SM Energy currently uses diesel fuel as the power source for the majority of its drilling and completion operations. This opportunity considers the use of new technologies such as dual fuel frac fleets, electric frac fleets and dual fuel drilling rigs. SM Energy calculates the potential cost savings from using natural gas versus diesel for on-site power. The shift in energy supply could also reduce the potential impact of a carbon pricing mechanism by calculating the reduction in emissions from new technologies.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

7,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The financial impact of the use of new technologies involves the application of dual fuel and electric frac utilization on drilling rigs and frac spreads, and the reduction in costs

that these technologies potentially offer compared to the cost of using diesel fuel to power our operations. The modeling for this opportunity considered the time period from 2023 to 2030 so the Company could focus on new technologies on the horizon and the key expected innovations they would bring.

The potential financial impact of this opportunity resulted in a decrease in operating costs of approximately \$7 million per year, undiscounted, for the years 2021 -2030 based on the scenario assumptions described for modeling the impact of this risk.

It appears very likely that technology suppliers in the oil and gas sector will accelerate deployment of more climate friendly technologies and emphasize innovations that reduce carbon intensity. The medium impact is possible because the speed of deployment/innovation could be somewhat slower or the marginal contribution of the new technologies to reducing carbon intensity could be less than anticipated.

Cost to realize opportunity

3,000,000

Strategy to realize opportunity and explanation of cost calculation

We expect that the deployment of climate friendly technology will accelerate in the near future. The total expected cost of \$3 million per year includes the application of dual fuel and electric frac utilization on drilling rigs and frac spreads.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Markets

Primary climate-related opportunity driver

Access to new markets

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

This opportunity focuses on power sector customers demanding more certified responsibly sourced gas because of its lower carbon intensity compared to other fossil fuels and the increase in efforts to address all three GHG emissions scopes in the value chain.

SM Energy produces natural gas predominantly from its operations in South Texas,

where it achieves a nearly zero flaring percentage as well as employing continued efforts to reduce fugitive emissions. SM Energy could benefit from its low-methane production processes and has the opportunity to investigate certification programs. Certified gas could lead to new business opportunities, although questions remain about how the marketplace will recognize attributes. We believe the Company's South Texas gas would meet certain carbon intensity certification standards without significant additional investment.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)**Potential financial impact figure – minimum (currency)**

1,800,000

Potential financial impact figure – maximum (currency)

3,700,000

Explanation of financial impact figure

SM Energy anticipates an increase in revenue using a percentage of our natural gas production (35%) and premium of \$0.05 - \$0.10. This opportunity was modeled for the time period from 2025 - 2030 and resulted in a potential total undiscounted financial impact ranging from \$1.8 - \$3.7 million per year, undiscounted.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

To realize this opportunity, we would focus on specific natural gas assets within our portfolio that offer low carbon intensity and represents more than one third of our production. The cost of realizing this opportunity is estimated at \$0, as producing from these assets is already considered in our short, medium, and long-term plans.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization’s strategy and/or financial planning?

Yes

C3.1b

(C3.1b) Does your organization intend to publish a low-carbon transition plan in the next two years?

	Intention to publish a low-carbon transition plan	Comment
Row 1	No, we do not intend to publish a low-carbon transition plan in the next two years	

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization’s use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
IEA Sustainable development scenario	As part of its normal planning and strategy process in 2020, SM Energy considered the increasing likelihood that a carbon pricing mechanism would be implemented in the United States. The Company modeled the impact of this risk that considered various pricing and timing assumptions. As a result of this analysis, it was determined that, due to the strong operating margin of SM Energy’s assets as projected in long-term plans and based on the results of the hypothetical scenarios considered to date, the Company would be able to absorb the additional cost and maintain profitability. In addition and in conjunction with efforts to advance integration of ESG into strategy and planning, SM Energy’s ESG Committee and Management ESG Committee elected to formalize climate-related scenario analysis, employing the IEA Sustainable Development Scenario (SDS). The IEA SDS was selected as it is aligned with the TCFD’s recommendation of using a scenario with a pathway to 2 degree C or below. SM Energy employed a time horizon that extended through 2030 given the Company’s current inventory life absent any acquisitions. The results and potential action items resulting from this analysis are currently being reviewed by Management.

	<p>To help quantify climate-related risks and opportunities, SM Energy conducted a scenario planning exercise to assess portfolio resilience using all of the Company's existing assets. Certain risks and opportunities assessed employed assumptions under the IEA SDS. This approach allows the Company to communicate to our stakeholders our understanding of future risks in relation to changing energy demand, mix, the emergence of new technologies, and the potential for a carbon pricing mechanism.</p>
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C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>SM Energy explores for, produces, and sells crude oil, natural gas and associated natural gas liquids. SM Energy does not provide services. The Company models scenarios of its forward financial and operating plans using strip commodity prices as well as higher and lower commodity price scenarios for short, medium and long-term planning. Futures prices inherently incorporate macro-economic supply and demand trends and market perceptions of future supply and demand. The IEA Sustainable Development Scenario (IEA SDS) analysis performed by the Company employs strip prices for years 2021-2025 (as of date) and includes IEA SDS price assumptions from 2025 forward (the IEA SDS does not provide a near term price deck), reflecting the potential impact of climate change-related supply and demand on commodity prices under that specific scenario.</p> <p>Independent of the IEA SDS, the Company conducts in-depth macro-economic reviews with its Board of Directors and evaluates potential long-term influences to the supply of and demand for its products, and therefore long-term pricing implications.</p> <p>Examples of such topics have included the potential for increased demand for LNG as a cleaner alternative to coal, increased demand for electric vehicles, and other environmental subjects. The Company's long-term strategy is to maintain a portfolio of top tier assets that are more resilient to lower commodity prices, and to operate those assets in a manner that optimizes capital efficiency. The Company also</p>

		maintains a portfolio with a diversified mix of oil, natural gas and NGLs to best adapt to potential changes in demand and pricing patterns.
Supply chain and/or value chain	Yes	<p>SM Energy engages with its supply chain on broader ESG efforts and specifically in regards to climate risks and opportunities, as reducing GHG and methane emissions are among the most relevant ways our industry can contribute. Examples of this have included:</p> <ul style="list-style-type: none"> • During 2019 and 2020, the SM Energy team worked with multiple midstream companies to increase interconnections between gas processing systems to provide system redundancy and improve the system design process. These efforts substantially contributed to a 75% reduction in flaring methane from our Midland Basin operations in 2020 as compared to 2019. Increasing the interconnections between gas processing plants enabled the Company to redirect natural gas in the event a third-party processing plant is unable to receive it, and collaboration with midstream companies included sharing forecasts for oil, natural gas and water volumes to better enable capacity design and properly scaled buildout. • During 2020, the Company pilot tested dual fuel technology for its completion operations, which substituted compressed natural gas or conditioned field gas for diesel fuel for lower combustion emissions. The Company is actively working with rig and fracture stimulation service providers in evaluating the use of both dual fuel and all electric equipment, as well as providers of high destruction flares and eGas lift, all of which may have the potential to reduce overall emissions. • The Company uses 100% local sand, which is estimated to reduce emissions from sand transport by 70% compared with northern US sources used prior to 2019. • The Company's 2020 GHG intensity of 7.87 mT CO₂e/MBoe is already beneath the IEA SDS 2030 target of 8.59 mT CO₂e/MBoe.
Investment in R&D	Yes	<p>SM Energy invests in technologies directed at reducing emissions. Examples of these investments have included:</p> <ul style="list-style-type: none"> • Upgrading controllers. In 2020, the Company installed 535 zero emissions and non-gas pneumatic controllers resulting in a significant reduction in methane emissions.

		<ul style="list-style-type: none"> • Installation of vapor recovery units (VRUs) and combustors at production facilities. VRUs provide at least 95% vapor recovery, removing valuable vapors and gases from storage tanks and routing them to pipelines for sale. This allows the capture, recovery and sales of regulated air emissions and methane. • Leak detection. SM Energy has invested in technologies to monitor fugitive emissions and ultimately drive the reduction in fugitive emissions. This has included audio/visual/olfactory inspections and optical imaging cameras across SM Energy operations. <p>In conjunction with the Company’s participation in The Environmental Partnership, the Company has undertaken a leak detection and repair (LDAR) program that exceeds regulatory requirements at all new facilities. During 2020, the Company exceeded goals for its LDAR program by implementing the technology at 60% of Midland Basin and South Texas facilities.</p>
Operations	Yes	<p>Potential risks and opportunities associated with climate change are identified, evaluated in financial and operational planning and certain opportunities are integrated into operations as appropriate. We are committed to exceptional safety, health, and environmental stewardship; making a positive difference in the communities where we live and work; and transparency in reporting on our progress in these areas. We set annual goals for our environmental, health and safety program focused on reducing the number of safety related incidents and the number and impact of spills of produced fluids. We also set annual goals for GHG emissions intensity and methane emissions as a percentage of total methane produced. In order to drive our performance with respect to these metrics through our operations, SM Energy’s 2020 short-term compensation program for all employees was tied to environmental and safety targets, including air emissions (specifically greenhouse gas intensity and methane intensity), as well as spill volumes per 1,000 barrels produced and total recordable incident rate (TRIR). The goal with respect to these metrics was to achieve top quartile performance compared to reporting American Exploration and Production Council (“AXPC”) members based on the trailing three-year average of survey responses and publicly available data from AXPC members. Additionally, short-term incentive compensation for 2020 was tied to the completion of a triennial EHS compliance audit</p>

		<p>and for putting systems in place to track broader ESG metrics to enable increased reporting in the future and increased employee awareness.</p> <p>SM Energy’s performance-based long-term incentive compensation granted to the executive team and qualifying employees in 2020 was 20% based on ESG performance metrics for emissions, safety and spills. One-half of the ESG target is tied to a reduction in GHG emissions intensity over the three-year program period from the base year 2019. The remainder is tied to employee and contractor safety as measured by TRIR and spill volume rates.</p> <p>In 2020, the Company achieved top quartile ranking among its AXPC peers for GHG intensity, methane emissions, spill volumes and safety. Additionally, the Company’s 2020 GHG intensity of 7.87 already exceeds the IEA SDS 2040 target of 8.59.</p>
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C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital expenditures Capital allocation Access to capital	<p>SM Energy incorporates a variety of factors and scenarios into its financial planning process that relate to potential climate change risks and opportunities, several of which are described above. Our core long-term strategy is to be a premier operator of top tier assets. Accordingly, our portfolio offers comparatively strong margins versus other operators, providing resilience to certain climate-related risks, specifically lower commodity prices or increased costs. In addition, commodity diversification offers opportunity for changes in capital allocation.</p> <p>The Company engages regularly with the investment community to gather input and feedback on ESG-related policies and disclosures. Investor engagement is reviewed with the Company’s Board of Directors, which influences our future strategic direction and is incorporated into our annual financial planning process.</p>

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Intensity target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Year target was set

2019

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1

Intensity metric

Other, please specify

Metric tons CO₂e per thousand barrels of oil equivalent (MBoe)

Base year

2019

Intensity figure in base year (metric tons CO₂e per unit of activity)

12.41

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure

100

Target year

2020

Targeted reduction from base year (%)

4.8

Intensity figure in target year (metric tons CO₂e per unit of activity) [auto-calculated]

11.81432

% change anticipated in absolute Scope 1+2 emissions

4.8

% change anticipated in absolute Scope 3 emissions**Intensity figure in reporting year (metric tons CO₂e per unit of activity)**

7.87

% of target achieved [auto-calculated]

762.1541767392

Target status in reporting year

Achieved

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

Target ambition**Please explain (including target coverage)**

For 2020, we achieved 100% of our GHG intensity target, which is not reflected in the auto-calculation above. The 2020 GHG intensity target was 11.8 mT CO₂e/mboe; actual 2020 GHG intensity was 7.87 mT CO₂e/mboe. The 2020 GHG intensity target was based on top-quartile performance compared to reporting AXPC members based on the trailing three-year average of survey responses and publicly available data from American Exploration & Production Council members from 2016-2018. Coverage is company-wide for U.S. onshore operations including all Basins reporting GHG to EPA per GHG Mandatory Reporting Rule (40 CFR 98 Subpart W).

C4.2**(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

Target(s) to reduce methane emissions

C4.2b**(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.****Target reference number**

Oth 1

Year target was set

2019

Target coverage

Company-wide

Target type: absolute or intensity

Intensity

Target type: category & Metric (target numerator if reporting an intensity target)

Methane reduction target

Other, please specify

methane emissions

Target denominator (intensity targets only)

Other, please specify

methane production

Base year

2019

Figure or percentage in base year

0.11

Target year

2020

Figure or percentage in target year

0.22

Figure or percentage in reporting year

0.1

% of target achieved [auto-calculated]

-9.0909090909

Target status in reporting year

Achieved

Is this target part of an emissions target?

Yes

Is this target part of an overarching initiative?

Other, please specify

Overall ESG

Please explain (including target coverage)

For 2020, we achieved 100% of our short-term compensation program methane intensity target, which is not reflected in the auto-calculation above. The 2020 methane intensity target was 0.22%, which was based on top-quartile performance compared to reporting AXPC members based on the trailing three-year average of survey responses and publicly available data from American Exploration & Production Council members

from 2016-2018; actual 2020 methane intensity was 0.10%. This climate-related target is part of a company-wide effort to track and communicate more ESG metrics.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	1	12,250
Not to be implemented		

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Fugitive emissions reductions
Oil/natural gas methane leak capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e)

12,250

Scope(s)

Scope 1

Voluntary/Mandatory

Mandatory

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

765,000

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

LDAR cost for mandatory per EPA 40 CFR 60 Subpart OOOOa, and voluntary per The Environmental Partnership.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	LDAR cost for mandatory per EPA 40 CFR 60 Subpart OOOOa, and voluntary per The Environmental Partnership.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

No

C-OG4.6

(C-OG4.6) Describe your organization’s efforts to reduce methane emissions from your activities.

Fugitive methane emissions during natural gas production has become a concern for the oil and gas industry as production of natural gas has increased with the emergence of shale gas. According to the 2019 IEA Global Methane Tracker, fugitive emissions were believed to account for approximately 20% of upstream methane emissions during the year. In 2016, the U.S. Environmental Protection Agency (EPA) and the Bureau of Land Management finalized regulations related to fugitive methane emissions. In 2020, the EPA revised some of those regulations, but are again undergoing review for additional rulemaking for new/modified facilities and existing facilities.

During 2020, SM Energy focused on leak detection and repair (LDAR) at our production facilities in both operating areas, the Midland Basin and South Texas. This focus was voluntary, but industry programs like this could result in being better prepared for additional government regulations of methane emissions. In response to potential increased regulation of fugitive emissions, SM Energy Operations set a goal to implement LDAR at 50% of facilities in 2020. This exceeded government regulations and included the Company’s commitment to the API Environmental Partnership, which sets targets far beyond regulatory requirements. During 2020, SM exceeded this goal by implementing LDAR at 60% of Midland Basin and 60% of

South Texas facilities. The approximate cost to implement LDAR at these facilities was \$765,000. This successful project resulted in approximately 31,200 Mcf of reduced methane emissions during the year at a cost of \$24.50 per Mcf methane.

SM participates in two programs that are part of The API Environmental Partnership that reduce methane emissions. Under the Leak Program, SM conducted surveys at 1,173 sites in 2020, which resulted in 12,250 mT CO₂e emissions savings. Under the Pneumatics Program, SM installed 535 zero-emission (instrument air or electronic) controllers, which resulted in less methane/CO₂e emissions.

SM Energy has implemented goals for methane emissions that impact compensation for every employee.

C-OG4.7

(C-OG4.7) Does your organization conduct leak detection and repair (LDAR) or use other methods to find and fix fugitive methane emissions from oil and gas production activities?

Yes

C-OG4.7a

(C-OG4.7a) Describe the protocol through which methane leak detection and repair or other leak detection methods, are conducted for oil and gas production activities, including predominant frequency of inspections, estimates of assets covered, and methodologies employed.

Predominant frequency of inspections: semi-annual; estimates of assets covered: 60% (for CY 2020); methodologies employed: hand-held OGI camera following EPA 40 CFR 60 NSPS OOOOa.

In response to potential increased regulation of fugitive emissions, the Sr. VP/Operations and operations team set a goal to implement LDAR at 50% of facilities in 2020. This exceeded government regulations and includes the Company's commitment to the API Environmental Partnership, which sets targets far beyond regulatory requirements.

During 2020, SM exceeded this goal by implementing LDAR at 60% of Midland Basin and 60% of South Texas facilities. The approximate cost to implement LDAR at these facilities was \$765,000. This successful project resulted in approximately 31,200 Mcf of reduced methane emissions during the year at a cost of \$24.50 per Mcf.

Additional methane emissions reductions can be achieved by installing zero-emission controllers (electronic or air pneumatic controllers).

SM Energy has adopted a proactive approach to using intermittent or low-bleed gas pneumatics on many of our facilities, even before the EPA's NSPS OOOO regulation in 2011, which prohibited high-bleed gas pneumatics at new or modified facilities. We have converted certain pneumatic devices to operate on a compressed instrument air system, which replaces

the pressurized natural gas with atmospheric air, eliminating methane emissions. These systems have been installed at new facilities in our Midland Basin Region since 2017. In our South Texas Region, we are replacing gas pneumatic devices with solar and wind powered electronic controllers.

Under the Pneumatics Program, SM installed 535 zero-emission (instrument air or electronic) controllers, which resulted in less methane/ CO₂e emissions. To execute this strategy going forward in our Midland Basin operating area, we estimate spending at approximately \$30,000 per production battery and \$8,000 per wellhead on installing instrument air, as well as annual operation and maintenance costs of approximately \$118,000.

C-OG4.8

(C-OG4.8) If flaring is relevant to your oil and gas production activities, describe your organization's efforts to reduce flaring, including any flaring reduction targets.

SM Energy desires to eliminate or minimize flaring by setting targets, developing the appropriate monitoring tools, and identifying projects that support that objective. Each year a flaring goal is set and is monitored using daily operational data that provides operations management with the information needed to identify root causes for flaring and to take actions. Actions could include notifying and working with our midstream gas purchasers to identify and install gas off-loads to other purchasers, de-bottle necking and optimizing pipelines and equipment, and rescheduling capital expenditures in order to allow infrastructure to catch-up with development, thus eliminating or minimizing flaring. We are also members of The Environmental Partnership and Texas Methane and Flaring Coalition, both of which are focused on reducing flaring. We had a Midland Basin flaring target for 2020.

In response to potential increased regulation of CO₂e emissions, the Company's operations team set a flaring goal for our Midland Basin operations of 5.5% for 2020. During 2020, SM exceeded this goal by reducing flaring to 2.2% of total Midland Basin gas production. Total Company flaring was 0.81% of total natural gas production. Flaring is reduced by minimizing gas processing system capacity restraints.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

775,678

Comment

As reported per EPA GHG Mandatory Reporting Rule 40 CFR 98 Subpart W.

Scope 2 (location-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO₂e)

86,338

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO₂e)

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

US EPA Mandatory Greenhouse Gas Reporting Rule

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO₂e?

Reporting year

Gross global Scope 1 emissions (metric tons CO₂e)

477,808

Comment

As reported per EPA GHG Mandatory Reporting Rule 40 CFR 98 Subpart W.

C6.2

(C6.2) Describe your organization’s approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization’s gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

98,418

Comment

Electric utility emissions for Permian (98,169 mT CO2e) and South Texas (249 mT CO2e).

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization’s gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Not evaluated

Please explain

Capital goods

Evaluation status

Not evaluated

Please explain

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Not evaluated

Please explain

Upstream transportation and distribution

Evaluation status

Not evaluated

Please explain

Waste generated in operations

Evaluation status

Not evaluated

Please explain

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

151

Emissions calculation methodology

Supplement to the Corporate Value Chain (Scope 3) Accounting & Reporting Standard; Category 6, Business Travel, Spend Method. US Environmentally-Extended Input-Output (USEEIO) Models, Supply Chain Greenhouse Gas Emission Factors for US Industries and Commodities, SupplyChainEmissionFactorsforUSIndustriesCommodities.xlsx. Spend from business travel (airfare, ground transportation, lodging) multiplied by EEIO GHG kg/\$ emission factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

460

Emissions calculation methodology

Supplement to the Corporate Value Chain (Scope 3) Accounting & Reporting Standard; Category 7, Employee Commuting, Distance Method. U.S. EPA GHG Emission Factors Hub. Total mileage from employee (passenger) vehicles multiplied by mass/mile GHG emission factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Upstream leased assets

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

1,577

Emissions calculation methodology

Supplement to the Corporate Value Chain (Scope 3) Accounting & Reporting Standard; Category 8, Upstream Leased Assets, Average Data Method. U.S. EPA GHG Emission Factors Hub. Total mileage from leased company vehicles (light duty trucks) multiplied by mass/mile GHG emission factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Downstream transportation and distribution

Evaluation status

Not evaluated

Please explain

Processing of sold products

Evaluation status

Not evaluated

Please explain

Use of sold products

Evaluation status

Not evaluated

Please explain

End of life treatment of sold products

Evaluation status

Not evaluated

Please explain

Downstream leased assets

Evaluation status

Not evaluated

Please explain

Franchises

Evaluation status

Not evaluated

Please explain

Investments

Evaluation status

Not evaluated

Please explain

Other (upstream)

Evaluation status

Please explain

Other (downstream)

Evaluation status

Please explain

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO₂e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.000511

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

576,226

Metric denominator

unit total revenue

Metric denominator: Unit total

1,126,673,000

Scope 2 figure used

Location-based

% change from previous year

6

Direction of change

Decreased

Reason for change

Much lower emissions (Scope 1) in 2020 due primarily to decreased drilling and completion activity, which offset the reduction in revenue. 2019 intensity was 0.000542 CO₂e/revenue(862,016 mT CO₂e/1,590,105,000 revenue).

Intensity figure

9.49

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO₂e)

576,226

Metric denominator

Other, please specify
thousand barrels of oil equivalent (MBoe)

Metric denominator: Unit total

60,713

Scope 2 figure used

Location-based

% change from previous year

45

Direction of change

Decreased

Reason for change

Much lower emissions (Scope 1) in 2020 due primarily to decreased drilling and completion activity, while decrease in production was less. 2019 intensity was 13.79 mt CO₂e/mboe (862,016 mT CO₂e/62,525 mboe).

C-OG6.12

(C-OG6.12) Provide the intensity figures for Scope 1 emissions (metric tons CO₂e) per unit of hydrocarbon category.

Unit of hydrocarbon category (denominator)

Other, please specify
thousand barrel of oil equivalent (mboe)

Metric tons CO₂e from hydrocarbon category per unit specified

7.87

% change from previous year

37

Direction of change

Decreased

Reason for change

Much lower emissions due primarily to decreased drilling and completion activity in 2020, while decrease in production was less. 2019 intensity was 12.41mt CO₂e/mboe (775,678 mT CO₂e/62,525 mboe).

Comment

C-OG6.13

(C-OG6.13) Report your methane emissions as percentages of natural gas and hydrocarbon production or throughput.

Oil and gas business division

Upstream

Estimated total methane emitted expressed as % of natural gas production or throughput at given division

0.1

Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division

0.04

Comment

Total methane % of natural gas production is from C4.2b: % methane emitted/gross methane production. Total methane per total hydrocarbon production is expressed as metric tons methane as CH₄ emitted/gross hydrocarbon production in mboe.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	422,749	Other, please specify 40 CFR 98 Subpart W U.S. EPA GHG Reporting Rule
CH4	54,571	Other, please specify GWP of 25 per 40 CFR 98 Subpart W U.S. EPA GHG Reporting Rule
N2O	488	Other, please specify GWP of 298 per 40 CFR 98 Subpart W U.S. EPA GHG Reporting Rule

C-OG7.1b

(C-OG7.1b) Break down your total gross global Scope 1 emissions from oil and gas value chain production activities by greenhouse gas type.

Emissions category

Combustion (excluding flaring)

Value chain

Upstream

Product

Unable to disaggregate

Gross Scope 1 CO2 emissions (metric tons CO2)

321,404

Gross Scope 1 methane emissions (metric tons CH4)

214

Total gross Scope 1 emissions (metric tons CO2e)

321,685

Comment

Emissions category

Flaring

Value chain

Upstream

Product

Unable to disaggregate

Gross Scope 1 CO2 emissions (metric tons CO2)

101,264

Gross Scope 1 methane emissions (metric tons CH4)

197

Total gross Scope 1 emissions (metric tons CO2e)

111,750

Comment

Includes flaring of associated gas and storage tanks vapors.

Emissions category

Venting

Value chain

Upstream

Product

Unable to disaggregate

Gross Scope 1 CO2 emissions (metric tons CO2)

63

Gross Scope 1 methane emissions (metric tons CH4)

1,275

Total gross Scope 1 emissions (metric tons CO2e)

31,942

Comment

Sources for vented emissions includes pneumatic devices and pumps, liquids unloading, well venting with hydraulic fracturing, gas well venting without hydraulic fracturing, and reciprocating compressors.

Emissions category

Fugitives

Value chain

Upstream

Product

Unable to disaggregate

Gross Scope 1 CO2 emissions (metric tons CO2)

19

Gross Scope 1 methane emissions (metric tons CH4)

496

Total gross Scope 1 emissions (metric tons CO2e)

12,431

Comment**C7.2****(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	477,808

C7.3**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

By business division

C7.3a**(C7.3a) Break down your total gross global Scope 1 emissions by business division.**

Business division	Scope 1 emissions (metric ton CO2e)
Permian Basin	420,955
South Texas Basin	56,853

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4**(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.**

	Gross Scope 1 emissions, metric tons CO2e	Comment
Oil and gas production activities (upstream)	477,808	
Oil and gas production activities (midstream)		
Oil and gas production activities (downstream)		

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
United States of America	98,418			

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Permian Basin	98,169	
South Texas Basin	249	

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Oil and gas production activities (upstream)	98,418		Electric utility emissions for Permian (98,169 mT CO2e) and South Texas (249 mT CO2e).
Oil and gas production activities (midstream)			

Oil and gas production activities (downstream)			
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C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption				
Other emissions reduction activities				
Divestment				
Acquisitions				
Mergers				
Change in output				
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified				
Other	285,790	Decreased	33	2019: 862,016 2020: 576,226 Difference: 285,790

				(285,790/862,016)x100%: 33% Much lower emissions (Scope 1) due primarily to decreased drilling and completion activity in 2020.
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C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 5% but less than or equal to 10%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization’s energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	1,436,574	1,436,574
Consumption of purchased or acquired electricity		55,516	166,546	222,062
Consumption of self-generated non-fuel renewable energy		18		18
Total energy consumption		55,534	1,603,120	1,658,654

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

572,463

MWh fuel consumed for self-generation of electricity

2,885

MWh fuel consumed for self-generation of heat

0

Emission factor

-88

Unit

Emissions factor source

Comment

Fuels (excluding feedstocks)

Compressed Natural Gas (CNG)

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

3,911

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Emission factor

-88

Unit

Emissions factor source

Comment

Fuels (excluding feedstocks)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

860,201

MWh fuel consumed for self-generation of electricity

6,558

MWh fuel consumed for self-generation of heat

0

Emission factor

-88

Unit

Emissions factor source

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	12,853	12,853	18	18
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-OG9.2a

(C-OG9.2a) Disclose your net liquid and gas hydrocarbon production (total of subsidiaries and equity-accounted entities).

	In-year net production	Comment
Crude oil and condensate, million barrels	23	
Natural gas liquids, million barrels	6.1	
Oil sands, million barrels (includes bitumen and synthetic crude)	0	
Natural gas, billion cubic feet	103.9	

C-OG9.2b

(C-OG9.2b) Explain which listing requirements or other methodologies you use to report reserves data. If your organization cannot provide data due to legal restrictions on reporting reserves figures in certain countries, please explain this.

Our internal controls over the recording of proved reserves are structured to objectively and accurately estimate our reserve quantities and values in compliance with the SEC's regulations. Our process for managing and monitoring our proved reserves is delegated to our corporate reserves group and is coordinated by our Corporate Engineering Manager, subject to the oversight of our management and the Audit Committee of our Board of Directors. Technical, geological, and engineering reviews of our assets are performed throughout the year by our Development Department. Data, obtained from these reviews, in conjunction with economic data and our ownership information, is used in making a determination of estimated proved reserve quantities. Our Development Department's technical staff do not report to our Corporate Engineering Manager; they report to the Senior Vice President of Exploration, Development and EHS. This design is intended to promote objective and independent analysis in the proved reserves estimation process.

Ryder Scott is an independent petroleum engineering consulting firm that has been providing petroleum engineering consulting services throughout the world for over 80 years. Ryder Scott performed an independent audit using its own engineering assumptions, but with economic and ownership data we provided. Ryder Scott audits a minimum of 80 percent of our total calculated proved reserve PV-10. In the aggregate, the proved reserve amounts of our audited properties determined by Ryder Scott are required, per our policy, to be within 10 percent of our proved reserve amounts for the total Company, as well as for each respective major asset.

In addition to a third-party audit, our reserves are reviewed by our management with the Audit Committee of our Board of Directors. Our management, which includes our President and Chief Executive Officer, Executive Vice President and Chief Financial Officer, and Senior Vice President of Exploration, Development and EHS, is responsible for reviewing and verifying that the estimate of proved reserves is reasonable, complete, and accurate. The Audit Committee reviews a summary of the final reserves estimate in conjunction with Ryder Scott's results and also meets with Ryder Scott representatives, separate from our management, from time to time to discuss processes and findings.

C-OG9.2c

(C-OG9.2c) Disclose your estimated total net reserves and resource base (million boe), including the total associated with subsidiaries and equity-accounted entities.

	Estimated total net proved + probable reserves (2P) (million BOE)	Estimated total net proved + probable + possible reserves (3P) (million BOE)	Estimated net total resource base (million BOE)	Comment
Row 1			404.6	The Company does not publish 2P or 3P reserves.

C-OG9.2d

(C-OG9.2d) Provide an indicative percentage split for 2P, 3P reserves, and total resource base by hydrocarbon categories.

	Net proved + probable reserves (2P) (%)	Net proved + probable + possible reserves (3P) (%)	Net total resource base (%)	Comment
Crude oil/ condensate/ natural gas liquids			57	This percentage relates to our reported 1P reserves. The Company does not publish 2P or 3P resources.
Natural gas			43	This percentage relates to our reported 1P reserves. The Company does not publish 2P or 3P resources.
Oil sands (includes bitumen and synthetic crude)			0	

C-OG9.2e

(C-OG9.2e) Provide an indicative percentage split for production, 1P, 2P, 3P reserves, and total resource base by development types.

Development type

Onshore

In-year net production (%)

100

Net proved reserves (1P) (%)

100

Net proved + probable reserves (2P) (%)**Net proved + probable + possible reserves (3P) (%)****Net total resource base (%)**

100

Comment

The Company does not publish 2P or 3P resources.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	No	

C-OG9.7

(C-OG9.7) Disclose the breakeven price (US\$/BOE) required for cash neutrality during the reporting year, i.e. where cash flow from operations covers CAPEX and dividends paid/ share buybacks.

27

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

 FINAL ERM CVS 2020 Assurance Statement SM Energy_22July.pdf

Page/ section reference

Files attached to this question

FINAL ERM CVS 2020 Assurance Statement SM Energy_22July.pdf

Relevant standard

ERM GHG Performance Data Assurance Methodology

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, we do not verify any other climate-related information reported in our CDP disclosure

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, but we anticipate being regulated in the next three years

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

SM Energy anticipates being regulated by a carbon pricing system within the next three years. As part of our annual planning process, we consider a range of scenarios in anticipation of a carbon tax/pricing mechanism being implemented and calculate the financial impact that it could have on the Company. While the form and cost of new regulations are unknown, the Company considered hypothetical scenarios in its financial and operational business planning process to consider a range of effects from a carbon pricing mechanism. Collaboration across departments including operations, EHS/regulatory, ESG and corporate planning combined to develop potential pricing, timing and calculations to feed various scenarios to evaluate the potential impact of this emerging regulation. These results were then reviewed with the Board of Directors during the Company's normal strategy and planning process. (Result) As a result of this analysis, it was determined that, due to the strong operating margin of SM Energy's assets as projected in long-term plans and based on the results of the hypothetical scenarios considered to date, the Company would be able to absorb the additional cost and maintain profitability. In addition, the decision was made to elevate the analysis of this risk by employing IEA SDS scenario analysis assumptions, which consider annually increasing carbon emissions costs and a longer time frame. The results and potential action items resulting from this analysis are currently being reviewed by Management.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

- Navigate GHG regulations
- Stakeholder expectations
- Change internal behavior
- Drive energy efficiency
- Drive low-carbon investment
- Stress test investments
- Identify and seize low-carbon opportunities
- Supplier engagement

GHG Scope

- Scope 1
- Scope 2

Application

Cost of carbon shadow pricing applied to scope 1 and 2 emissions (effective across entire Company) to long-range planning scenarios. Absent a standardized carbon pricing system or carbon price-related regulation in the U.S., the Company employed a theoretical cost of carbon based on average costs per mT in proposed legislation and as reported in peer data.

Actual price(s) used (Currency /metric ton)

30

Variance of price(s) used

We have evaluated the impacts of shadow carbon pricing using \$30 - \$100 mT CO₂e.

Type of internal carbon price

Shadow price

Impact & implication

In late 2020, the Company's long-term strategy and planning process incorporated carbon pricing. Absent a standardized carbon pricing system or carbon price-related regulation in the U.S., the Company employed a theoretical cost of carbon based on average costs in proposed legislation and as reported in peer data. Based on the results of hypothetical scenarios considered to date, the Company would be able to absorb the additional cost and maintain profitability. Scenarios that incorporated carbon pricing were presented to executive management and reviewed by the Board of Directors as part of the long-term strategy and planning process.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

0

% total procurement spend (direct and indirect)

5

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

Increased awareness of suppliers and the reduction of our overall carbon footprint.

Impact of engagement, including measures of success

SM Energy gathered data from suppliers regarding the intensity of their process to potentially use in future supplier selection.

Comment

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

% of suppliers by number

1

% total procurement spend (direct and indirect)

14

% of supplier-related Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

The rationale for this engagement was to participate in advancing technologies with the potential to reduce emissions and reduce costs.

Impact of engagement, including measures of success

During 2020, SM Energy performed dual-fuel and electric power source testing with drilling and stimulation contractors. The Company also collaborated with suppliers on electric compression, solar and midstream opportunities.

Comment

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Trade associations

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

American Exploration and Production Council (AXPC)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The American Exploration and Production Council (AXPC) is a national trade association representing the largest independent oil and natural gas exploration and production companies in the United States. American oil and gas producers have an irreplaceable role in meeting the challenge of global climate change. The AXPC supports innovative, collaborative solutions that lower greenhouse gas (GHG) emissions while meeting the world's growing need for abundant, low cost, reliable energy. Successful public policy must recognize that oil and gas underpins our standard of living and American oil and gas is critical to our national security and economic prosperity. AXPC works with regulators and policymakers to better educate them on our operations so that they will be able to create sound fact-based public policies that result in the safe, responsible exploration and production of America's vast oil and natural gas resources.

Oil and gas companies routinely report on environmental, social and governance (ESG) performance, demonstrating their accountability for addressing challenges and risks affecting the industry, the environment, and our commitment to sustainable operations. Robust ESG reporting is important to both companies and stakeholders, and while there are a number of frameworks available, there has been no standardized framework for reporting consistent metrics with consistent methodologies for the upstream oil and gas industry.

To provide investors and the public with transparency and consistency for key upstream ESG indicators, AXPC launched the AXPC ESG Metrics Framework and Template in February 2021. These are available for use on a voluntary basis in sustainability reporting beginning in 2021. AXPC's ESG Metrics and Framework centers around five key metrics groupings that AXPC members believe are essential to capture in promoting more consistent reporting across its members companies – Greenhouse Gas (GHG) Emissions, Flaring, Spills, Water Use and Safety.

The following principles will guide AXPC's climate advocacy efforts, including policy that:

- Facilitates meaningful GHG emissions reductions
- Balances economic, environmental and energy security needs
- Promotes innovation

How have you influenced, or are you attempting to influence their position?

SM Energy's membership in the AXPC is active, and our President and CEO serves on the AXPC Board of Directors. We also participate on certain AXPC committees and various workgroups in support of deriving safety and emissions metrics most relevant to the oil and natural gas industry to best support increased and comparative disclosures.

Trade association

American Petroleum Institute (API)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

API and its members commit to delivering solutions that reduce the risks of climate change while meeting society's growing energy needs. The API supports global action that drives greenhouse gas (GHG) emissions reductions and economic development. The natural gas and oil industry plays a vital role in advancing human and economic prosperity that is essential to extending the benefits of modern life. One way the industry accomplishes this is by developing and deploying technologies and products that continue to reduce GHG emissions.

API will lead by providing platforms for industry action to:

- Reduce GHG emissions through industry-led solutions, and
- Actively work on policies that address the risks of climate change while meeting the global need for affordable, reliable and sustainable energy.

How have you influenced, or are you attempting to influence their position?

As a small to mid-cap company, with finite resources, SM Energy largely relies on peer data and its participation in industry trade groups and programs, such as The API Environmental Partnership, to inform its business and operational decisions related to the legal, regulatory, and social environment in which the industry and the Company operates, including climate related issues.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

SM Energy is committed to developing oil and gas resources in an environmentally responsible and sustainable manner. Our Board of Directors has been consistently engaged in reviewing our climate related efforts to date, and with the designation of a specific Board committee to oversee our ESG efforts, we expect to make even more transparent connections between our strategy, ESG performance goals, and compensation practices. Our leadership team is highly engaged with the trade associations that the Company participates in and monitors the positions of those trade associations to ensure their policies are consistent with SM Energy's overall climate change strategy. In early 2020, responsibilities of Corporate EHS were elevated as part of a re-organization. The Sr. VP Development and EHS is responsible for ensuring all EHS policies and programs are implemented effectively. This role works closely with Sr. VP of Operations to drive a strong EHS culture focused on continuous improvement within our organization and with all of our vendors and contractors. In addition, collaboration with senior leaders to set strategy and drive a forward-looking approach to ESG Matters and integration with EHS objectives was achieved in 2020. Other processes that we have in place include contractor safety training, contractor EHS monitoring, field contractor safety reviews, independent EHS field audits, and benchmarking and analysis of peer EHS and ESG performance. The Company was actively engaged the climate-related framework developed by AXPC to promote consistent reporting of climate-related disclosures.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

 TCFD Mapping to 2021 CDP Climate Change Questionnaire - SM Energy Company.pdf

Page/Section reference

Content elements

Governance
 Strategy
 Risks & opportunities
 Emissions figures
 Emission targets

Comment

Publication

In voluntary sustainability report

Status

Underway – previous year attached

Attach the document

 SM Energy CRR 2019.pdf

Page/Section reference

Content elements

Governance
Strategy
Emissions figures
Emission targets

Comment

Publication

In other regulatory filings

Status

Complete

Attach the document

 SM Proxy 2021.pdf

Page/Section reference

Strategy: 2; Governance: 2-13, 22-25; Other: 31, 35; Emission targets: 39

Content elements

Governance
Strategy
Emission targets
Other metrics

Comment

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	President and Chief Executive Officer	Chief Executive Officer (CEO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

Please confirm below

I have read and accept the applicable Terms