RANGE RESOURCES®

2020 Corporate Sustainability Report

CREATING SUSTAINABLE VALUE FOR OUR SHAREHOLDERS AND COMMUNITIES

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1. A Letter to Our Stakeholders

Letter from Our Board of Directors

Dear Stakeholders,

Range Resources' emphasis on achieving sustainable performance extends beyond reporting and statistics. Our Board understands that sustainability is ultimately about creating long-term value, which includes a commitment to environmental stewardship and positively contributing to the communities where we operate.

To Range, a commitment to sustainability is the purpose-focused action behind the short- and long-term goals we set as a company, which drive the decisions we make every day.

As Board members, we take an active and engaged role in monitoring and evaluating the company's performance to ensure Range meets or exceed its goals and objectives.

Through detailed reports and updates, our Board provides robust oversight and accountability to ensure the company continues to deliver sustainable value to its shareholders and other key stakeholders.

Industry Leadership in Sustainability

Sustainability is not a new commitment for Range or its leadership. It's a fundamental business priority that has long been embraced and fostered at the highest organizational levels.

The progress we have made as a company is a testament to the focus and dedication of Range's leadership to that priority, and sustainability will continue to serve as a guiding principle in the years ahead.

This focused approach has positioned Range as an industry leader by continuing to innovate and embrace cutting-edge strategies. Through this leadership, we are proud of the fact that Range has pioneered environmental practices and industry standards.

There have been significant milestones along Range's sustainability journey, particularly as it relates to our environmental efforts.

By committing to a large-scale water recycling program more than a decade ago, Range became the first company in the industry to reuse nearly 100 percent of its produced water in Pennsylvania.

We are industry pioneers when it comes to water use, achieving one of the lowest freshwater withdrawal rates among peers (58 percent in 2019) and among the highest reuse rates in the state of Pennsylvania; reusing 99.2 percent of our own flowback and produced water plus additional significant volumes of reuse water from other operators (adding up to 147 percent of our own produced water and flowback).

Significant achievements like these are the result of goalsetting, innovation, accountability, and, most importantly, a commitment to sustainability throughout the organization.

In 2018, Range joined the Environmental Partnership, a coalition of more than 40 companies dedicated to improving the industry's environmental performance through responsible natural gas and oil development. Through its work with the partnership, Range is actively committed to analyzing and sharing industry best practices and technologies intended to improve understanding of emissions and how best to reduce them.

Looking to the Future

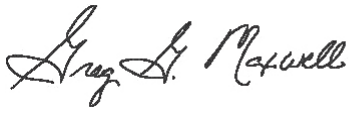
As this year's Sustainably Report demonstrates, Range continues to push the boundaries to achieve an increasingly more sustainable business, with realizing further emissions reductions as a key area of continuous focus. As part of this commitment, the company also shared its ambitious emissions reduction targets for 2025.

The sustainability milestones Range has achieved are significant, and the goals the company is setting are challenging by design.

On behalf of the Board of Directors, we are very pleased with what Range has accomplished, and we are focused on the opportunity to maintain the company's industry leadership. We believe that a proper focus on sustainability benefits all stakeholders and enhances the long-term value of our company.

We look forward to continuing to support Range's sustainability goals and efforts, which are central to delivering value to shareholders.

Sincerely,



Greg G. Maxwell
Chairman of the Board of Directors

Letter from Our CEO

Dear Stakeholders,

On behalf of the entire Range Resources Corporation team, we are pleased to share our second Sustainability Report.

We have made significant progress toward our goals over the past year thanks to a dedicated focus on our core values – integrity, transparency, innovation and sustainable performance – which guide our decision-making and success.

It is with these values in mind, and our commitment to transparency and meaningful stakeholder engagement, that we have further enhanced the level of detail provided in this year's report.

Our goal is to be as transparent as possible when it comes to sustainability reporting. We understand the importance of earning and maintaining the trust of our various stakeholders.

In the face of an evolving energy landscape, our business has remained resilient and nimble, ready to meet the needs and expectations of our stakeholders.

Range's commitment to operating safely and responsibly has always been central to our strategy, as we endeavor to deliver value to our shareholders while expanding our commitment to the environment and the communities where we work.

Our Leadership in Sustainability

From the field to the boardroom, our culture encourages, reinforces and focuses on challenging one another. Each and every day, our employees collaborate to find ways that further enhance our industry-leading approach to sustainability.

As laid out in this report, this continued progress is the result of a team-focused approach fostered across all employees, including management, who have an active leadership role in advancing these commitments.

Range's Board of Directors guides our strategies and closely holds the company accountable to its goals, while every aspect of our business is advancing Range's sustainability efforts.

This year's report highlights the important strides that we continue to make on key operational areas, most notably our bold emissions reduction strategy, including the use of innovative technologies and solutions-focused process improvements to set industry standards.

With significant Board guidance and oversight, we have reaffirmed ambitious near-term and long-term emissions reduction goals, which will ensure we are focused on maximizing every opportunity to further reduce our environmental and operating footprint.

These goals include continuing to reduce GHG emissions intensity with an objective of further reduction of 15 percent by 2025, as compared to 2019 GHG emissions intensity levels and achieving net zero greenhouse gas (GHG) direct emissions by 2025.

Our Commitment to Safety Excellence

In addition to our environmental priorities, the health and safety of people – employees and the public – is a top priority. Our safety culture is integrated into every aspect of our operations and is a responsibility that is promoted at every level across the organization. This commitment extends from within Range to the communities where we operate.

Thanks to the advanced processes and innovative technologies used by our Safety Team, as well as rigorous employee and contractor trainings, we track and trend data to detect potential conditions before they occur. In 2019, Range experienced zero incidents resulting in work restrictions or days away from work across our Range employee workforce.

We are grateful for the continuous support, guidance and dialogue with our stakeholders for our shared goals of safely providing the world with cleaner, affordable energy while providing value for all stakeholders through a sustainable approach to our work.

We are proud of these commitments and achievements, none of which would be possible without our dedicated Range employees and contractors who contribute to our success every day.

We will continue to hold ourselves accountable to heightened sustainability-related goals we set for ourselves and the industry and look forward to building on our progress.

Sincerely,

Jeffrey L. Ventura

Chief Executive Officer

2. Our Approach to Reporting

While Range has a long history of implementing cutting-edge environmentally responsible practices, our inaugural Corporate Sustainability Report was our first formal step to providing detailed insight into the company's approach, achievements and goals in our management of environmental social, and governance issues.

Building on Range's track record of transparency which includes our long-standing disclosures on our company website and ongoing industry-leading initiatives, we have produced this further enhanced 2020 Sustainability Report, covering a broader and deeper set of topics, which we consider material for our business and our stakeholders.

Reporting Guidance

This Sustainability Report is informed by multiple best practice sustainability reporting standards and frameworks. Guidelines and recommendations by the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Boards (SASB), and IPIECA's (formerly known as the International Petroleum Industry Environmental Conservation Association) sustainability reporting guidance have all been considered for the creation of this report.

Additionally, we reviewed issue-specific guidelines to provide an even deeper level of reporting on key areas such as Climate Change, which is guided by the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and other reporting frameworks.

In Appendix A of this report, we include indices that map our disclosures with the GRI, the SASB standards, the IPIECA guidelines, and the TCFD framework.

Continued Commitment to Transparency

As we continue to enhance our disclosures, we remain focused on improving our processes and procedures for tracking, monitoring, and measuring our performance in relation to the sustainability factors that are relevant and important for our company and our industry.

As part of this commitment, we intend to ensure we are being transparent and proactive in sharing the progress we are making against our sustainability goals with our stakeholders, which we consider a key element of our business strategy.

To Range Stakeholders,

We appreciate your interest in our performance as it relates to environmental, social and governance issues. We further appreciate the guidance you have provided over time, which we trust you will see reflected in this report.

We know that there are many sources for ESG performance information, but we believe that direct communication provides the most complete and accurate accounting. These pages are intended to represent our commitment to transparency and engagement and provide the reader a basis for evaluating our performance which our employees live out daily at every level and function at Range.

It is our belief that by operating in this manner, our interests and those of you, our stakeholders, are best served.

K. Scott Roy, Senior Vice President

3. About Range Resources

Range Resources Corporation (NYSE:RRC) is a leading U.S. independent natural gas and NGL producer with operations focused in stacked-pay projects in the Appalachian Basin. For more than 40 years, we have remained committed to continuously improving and meeting industry standards to deliver the greatest value to our shareholders, customers, and communities.

At Range, we incorporate industry-leading sustainability practices into every aspect of our business and often work with regulatory agencies to enhance rules and regulations. We have made significant contributions to advance sustainable business practices and engineering solutions for the industry, leading to overall enhanced environmental performance.

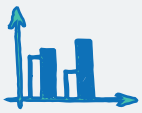
These contributions include a successful undertaking in 2009 to pioneer large-scale water recycling in shale development, which made us the first company to achieve nearly 100-percent water reuse levels.

In 2010, we became the first company to voluntarily disclose the composition of our hydraulic fracturing fluids on a per well basis and provide that information to the public online. This is now a standard industry practice through FracFocus and required regulation in all states with active oil and natural gas development.

We constantly look for new opportunities to enhance our operations to ensure we are always delivering the greatest value, beginning at the well site and extending to the communities where we operate.

Our Core Values

Day-in and day-out, every decision we make as a business is guided by our core values – *Performance, Innovation, Integrity, and Transparency*. With these values as the backbone of our corporate culture, we work tirelessly to act as a responsible steward – to our employees, communities, and other stakeholders who rely on us.



Performance

We are a results-driven company focused on delivering value to our shareholders, customers, partners, and local communities. To advance performance improvements, every Range employee is expected and empowered to continuously identify opportunities aimed at further enhancing our development, safety, and environmental goals.

Innovation

Range has a long and clear record of pioneering innovative solutions reflected in industry and regulatory standards. These efforts include our leadership on voluntary disclosures and the pioneering of water recycling and reuse technologies, which reduce both consumptive water needs and local truck traffic. This eye toward continuous innovation allows our operations to get safer and more cost-effective.

Integrity

Our performance is driven by the company's commitment to act with integrity in everything we do, from principled business decision-making to community partnerships. We are deeply connected with the communities we serve and work every day to operate in a manner that meets or exceeds the expectations of our stakeholders.

Transparency

Transparency and accountability to our shareholders, while supporting greater employee, community and partner confidence and engagement, is at the core of our culture. We actively work to ensure Range stakeholders have insight into our operations, as well as our contributions to the economy, the environment, and the communities where we operate. We solicit actionable input and implement recommendations from stakeholders and always seek opportunities to further improve.

4. Our Approach to Sustainability

We view sustainability as a confluence of long-term economic value creation and good stewardship of the environment and society.

Good governance, sustainable environmental practices, and social responsibility serve as fundamental principles of doing business that enhance long-term economic value creation for our company.

We are committed to continuing to invest in programs and initiatives that both protect the environment and our key stakeholders, while also helping us achieve long-term economic benefits on behalf of our shareholders.

In our daily operations, we see direct and indirect positive economic results from our long-term strategy and planning in environmental management and other initiatives.

For example, our leak detection program and methane emissions reduction initiatives translate into additional revenue from gas that does not leak into the atmosphere but is instead sold to our customers.

Corporate Governance:

Range and its Board of Directors are committed to implementing sound, transparent corporate governance principles that strengthen confidence and trust with our stakeholders.

Safety Leadership:

We uphold the highest standards when it comes to operating in a safe, compliant and ethical manner. We work every day to achieve this critical business goal.

Environmental Stewardship:

We are committed stewards of the environment, leveraging new technologies to develop clean-burning natural gas to contribute to broader emission reduction goals and incorporating sustainable practices into our operations. We strive to meet or exceed both expectations and regulatory requirements and seek improvement to guidelines and procedures.

Community Impact:

Our commitment to fostering thriving communities begins within the walls of our company, starting with the safety and well-being of our employees and extends to the communities where we live and work.

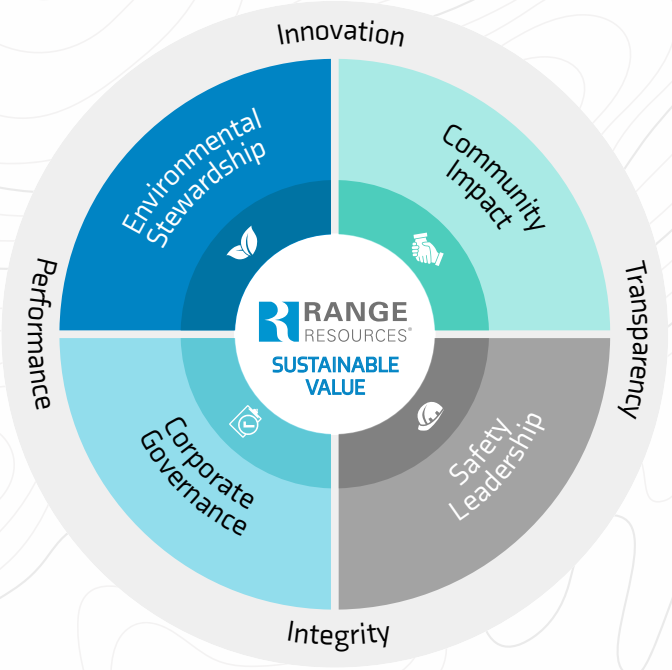
Our water management program and our investment in pipelines to transport water result in significant costs savings from the reuse of flowback and the avoidance of truck traffic for transportation.

Furthermore, our environmental stewardship and our social responsibility allow us to build stronger relationships with our communities, investors, and business partners, improving our access to commercial opportunities and enhancing our license to operate.

The following sections of this report outline the progress and achievements we have made against the core pillars of our sustainability strategy.

This strategy, which is focused on achieving sustainable value for all of our stakeholders, is approved by our Board of Directors and is closely overseen by our leadership team.

We also implement a rigorous management process that begins at the highest levels of our company to ensure we are successfully and responsibly executing against our commitments.



5. Report Highlights

Strong Governance Culture

Management and oversight of
sustainability factors
fully integrated into daily operations

Proactive, ongoing
outreach
to shareholders soliciting feedback on ESG efforts

33%
of independent directors are **female**

Community Impact

Contributed over
$442,000
to more than **350** non-profit and civic organizations across our core operating footprint

+700
employee hours volunteered at company-sponsored events and community initiatives

Environmental Stewardship

Goal:

Net ZERO GHG Direct Emissions
by 2025 through continued emissions reductions and the use of carbon offsets associated with reforestation and forest management, as well as the consideration of all other available and emerging offset methodologies

Goal:

Continue reducing GHG emissions intensity with interim objective of further reductions of
15%
by 2025 compared to 2019 GHG emissions intensity levels

Consistent results:

70%
reduction in GHG emissions intensity **since 2011** *

Reduced GHG Footprint:

33%
reduction in absolute GHG emissions **since 2017***

Total volume of spills ⩾ 1 bbl reduced by
73%
and total number of spills ⩾ 1 bbl reduced by
59%
since 2017

Water Management Leader:

H_2O

Recycled
147%
of produced water volume through our water sharing program

42%
of total water used is reused water

Health and Safety Leadership

Zero incidents
resulting in work restrictions or days away from work experienced by Range employee workforce **in 2019**

3,179 hours
of safety-related training completed by workforce over past year

* Revised 2019 data. This data was submitted to the U.S. Environmental Protection Agency in accordance with their guidelines. An error occurred in the calculation process. The calculation and reporting has been corrected and the 2020 update will show a continued trend in emission reductions, as has been shown in Range's recent investor relations materials.

6. Corporate Governance

Corporate governance serves as the cornerstone of our work to effectively manage risk and create sustainable long-term value.

Range's corporate governance framework is formed by our Corporate Governance Guidelines, the Certificate of Incorporation, the By-Laws, the Board Committee Charters, and our Code of Business Conduct and Ethics.

These governing documents are publicly available on our website.

Our Board of Directors

A significant portion of the execution of our governance framework rests with our Board of Directors. The Board is responsible for acting in the best interests of the Company and its shareholders by overseeing Senior Management, providing guidance in the development of the corporate strategy and policies, reviewing and approving major corporate decisions, and assisting the company in setting and achieving its objectives.

We believe in three core qualities that determine the Board's ability to effectively discharge its duties: Independence, Qualifications, and Diversity. Our Board's evaluation process serves as the foundation for ensuring that we maintain these qualities at the Board level.

Our guidelines require that the Board be at least majority independent per NYSE listing standards. In practice, since 2016, we have maintained a board structure whereby all members of the Board, except the CEO, have been independent directors.

Our Board is comprised of qualified individuals who have excelled in their respective areas of expertise and meet high personal and professional standards.

Range's directors bring a diverse set of skills and experiences to the Board, including executive management, leadership, finance, financial reporting, policymaking, geoscience and engineering, expertise in the oil and gas industry, and risk management.

	CEO / Senior Officer Experience	Industry Experience	Financial Reporting Experience	Banking/ Finance Experience	Geoscience/ Engineering	Technology	Risk Management
Brenda A. Cline	●		●	●			●
Margaret K. Dorman	●	●	●	●			●
James M. Funk	●	●			●		●
Steve D. Gray	●	●			●		●
Greg G. Maxwell	●	●	●	●		●	●
Steffen E. Palko	●	●			●		●
Jeffrey L. Ventura	●	●			●		●

In addition to the diversity of skillsets and expertise, our Governance and Nominating Committee strives to maintain diversity of backgrounds and perspectives, including diversity in tenure, gender, and age through the annual board evaluation process.

The Governance and Nominating Committee believes that annual board evaluations are a critical tool in assessing the effectiveness of the Board, its committees, and its directors.

The Committee considers the format of this evaluation process annually which, in recent years, has included anonymous questionnaires, one-on-one director interviews and the assistance of outside legal counsel.

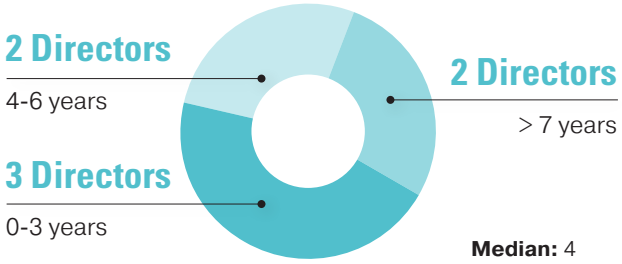
As shown below, the Board balances interests in continuity with the need for fresh perspectives and diversity that board refreshment and director succession planning can provide.

Risk Oversight

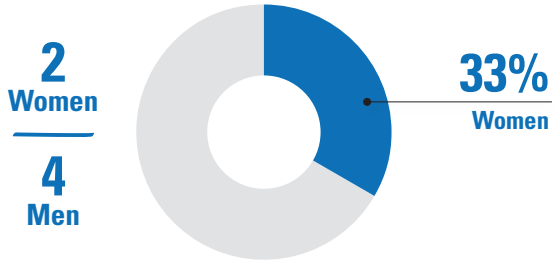
The Board's role in risk oversight recognizes the multifaceted nature of risk management. It is a control and compliance function, but it also involves strategic considerations in normal business decisions, as well as concerns regarding finance, security, cybersecurity, safety, health, and the environment.

While the Board has empowered its Committees with risk oversight responsibilities, it retains the direct oversight of environmental, health and safety issues, and any related social concerns.

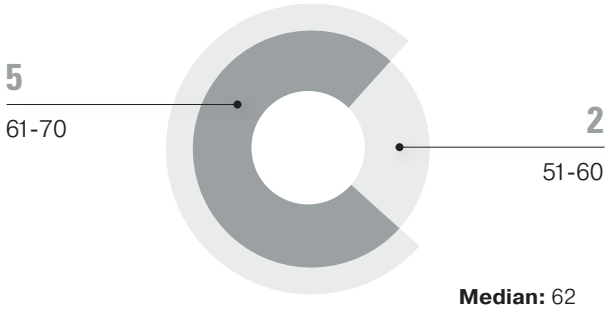
Each Committee meets regularly with management to review, as appropriate, compliance with existing policies and procedures and to discuss change or improvement that may be required or desirable.



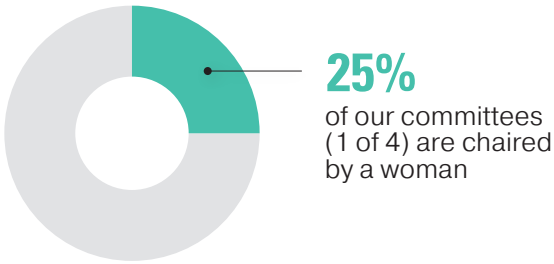
Director Tenure Diversity



Independent Director Gender Diversity



Director Age Diversity

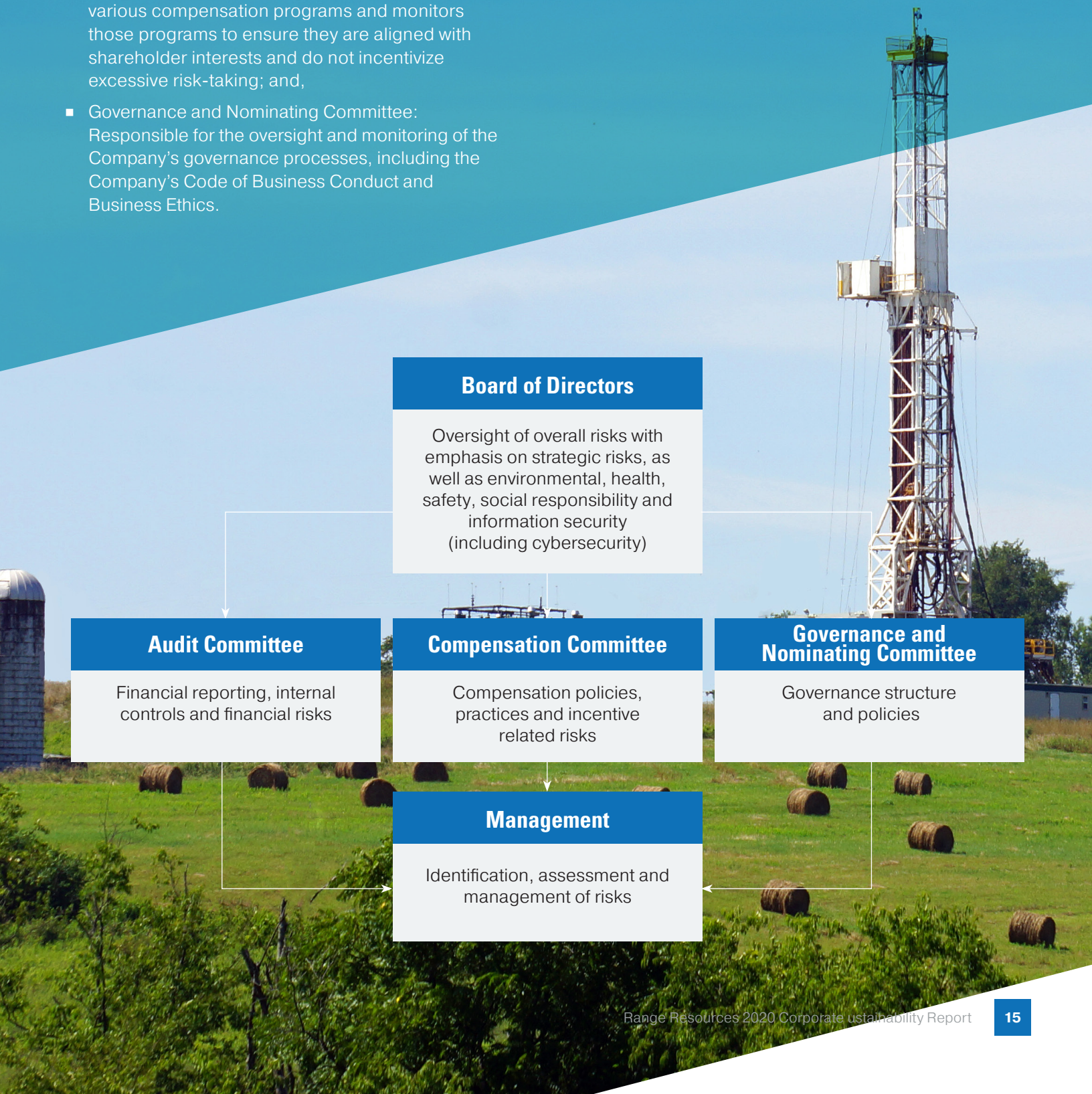


Gender Diversity in Board Leadership Roles

The three Board Committees include the following:

- Audit Committee: Evaluates the Company's financial reporting, interfaces with the independent auditor, Chief Financial Officer, and other members of management, and monitors the Company's compliance programs;
- Compensation Committee: Considers the possible risk implications of the Company's various compensation programs and monitors those programs to ensure they are aligned with shareholder interests and do not incentivize excessive risk-taking; and,
- Governance and Nominating Committee: Responsible for the oversight and monitoring of the Company's governance processes, including the Company's Code of Business Conduct and Business Ethics.

While the Board and its Committees oversee risk management, Range management is responsible for managing risk. We have a robust enterprise risk management process for identifying, assessing and managing risk, and monitoring risk mitigation strategies. A committee of officers and senior managers work with our Principle Accounting Officer to manage each enterprise-level risk and to identify emerging risks.



Board of Directors

Oversight of overall risks with emphasis on strategic risks, as well as environmental, health, safety, social responsibility and information security (including cybersecurity)

Audit Committee

Financial reporting, internal controls and financial risks

Compensation Committee

Compensation policies, practices and incentive related risks

Governance and Nominating Committee

Governance structure and policies

Management

Identification, assessment and management of risks

Oversight of Sustainability

We see the oversight of environmental, health, safety, and social issues as an integral part of our risk management and oversight process. We also believe that sustainable practices present significant opportunities for our business operations and our ability to maintain good working relationships with stakeholders.

In addition to the Board's oversight, our key Board Committees may also be involved with the oversight of certain sustainability-related elements of the business strategy. For example, the Audit Committee reviews environmental, social, health, and safety risks through its risk oversight responsibilities, while the Compensation Committee works to ensure that management incentives are aligned with our sustainability goals.

The Company's Environmental Compliance (EC) Department is responsible for the oversight and support of our Environmental Compliance policy, which is focused on compliance with rules and regulations and the company's commitment to implementing best practices that advance our environmental goals.

- Basic functions of the EC Department include advising the operating functions of the business with the responsibility of development of policies, inspecting regulated activities, and auditing compliance with laws, rules, and policies, including data management.
- Plans, procedures, and field guides are developed and maintained by the EC Department. Employees are encouraged to utilize EC Department resources and to seek assistance from any member of the EC or Legal staff as necessary to ensure Range's continued compliance with all applicable laws and regulations.
- The EC Department reports directly to Range's General Counsel, and then to the CEO and provides, at minimum, quarterly updates to the Board of Directors.

Our Safety Department is responsible for the oversight and support to the implementation of our Safety Policy, which includes Range's workforce and community health and safety management systems.

- Basic functions of the Safety Department include site and facility visits to monitor compliance with all applicable laws and regulations, monitoring of safety performance data, training and education of our

Range Resources Oversight of Sustainability

Board of Directors
The full Board has oversight of environmental, health, safety and social issues

Audit Committee	Compensation Committee	Governance and Nominating Committee
risk oversight responsibilities	alignment of management incentives with sustainability goals	sustainability governance mechanisms

Management Teams
Oversight and execution of business strategy

Environmental Compliance Department	Safety Department	Risk Management Committee
staffed with subject matter experts in air, waste, water and regulatory affairs who enforce environmental compliance in accordance with best practices	safety monitoring, training, and continuous improvement	cross-functional oversight of business risks, including sustainability factors

employees, incident investigation and mitigation, identifying continuous safety improvement opportunities, and contractor safety management.

- Safety Department representatives routinely engage with Range's Leadership and employees to assist in the development and implementation of processes and procedures that are designed to identify and mitigate risks and hazards in the workplace.
- The Safety Department reports to Range's Chief Operating Officer and provides ongoing updates to the Board of Directors.

Other management groups that may be involved with the oversight and implementation of sustainability issues include our cross-functional Risk Management Committee, which reviews a variety of environmental, health, safety, and social risk factors and reports directly to the audit committee, and our finance and investors relations departments, which incorporate sustainability-related factors in business planning and financial projections.

Code of Business Conduct and Ethics

Range has built a reputation of transparency, innovation, performance and integrity for more than 40 years. Our success is rooted in our adherence to core principles that govern the business, and we require our subsidiaries, contractors, directors, officers and employees to comply with all laws applicable to our business operations.

We also insist that our personnel follow a Code of Business Conduct and Ethics, crafted around our core values and designed to embody ethical transparency and compliance with the law.

The Code, available on our website, provides guidelines in relation to legal and environmental compliance, conflicts of interest, and protection of company property and assets. Violations will subject participants to disciplinary action. The company has instituted anonymous reporting procedures through a third-party service, available via the internet and phone for reporting any violations of the code, including financial, human resources, and other matters of conduct and ethics. Any organization is dependent upon human performance, which can result in errors of judgment and lapses in Compliance. Range maintains a practice of monitoring for and acknowledging its errors and accepting accountability for them.

Political Engagement

Range is committed to maintaining the highest ethical standards when it engages in political activity. We believe it is important to constructively participate in the political process to further the best interests of the company and our shareholders, and to improve the communities where we live and work. Our approach to political engagement is guided by this basic belief.

Supporting public policy at the national, state, and local levels which advances the safe exploration, production, transportation and use of natural gas is important to Range not only for our success but for the success of our industry, our partners and our nation's economy and security.

The Board of Directors oversees and regularly monitors our political engagement activities and the relevant policies and procedures, including the assessment of the effectiveness of our approach.

Our political engagement guidelines, which are available on our website, outline our approach to political contributions, trade associations, as well as reporting and disclosure.

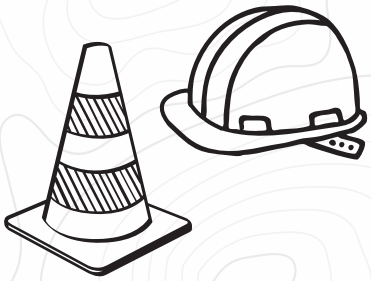
Our political contributions program adheres to a several principles, which are also guided by our Code of Business Conduct and Ethics, including the following:

- Contributions reflect the interests of the company and its stakeholders, not individual officers or directors.
- Corporate political expenditures require approval by the General Counsel and Government Affairs Department.
- Priority is given to direct political action committee (PAC) donations instead of donations through third parties. Any indirect contribution is monitored to assure consistency with the Company's values, policies, and long-term interests.
- No contribution will be given in anticipation of, in recognition of, or in return for an official act.
- Employees are not reimbursed for personal political contributions and employees will not be pressured or coerced to make any personal political expenditure.

Range also engages in the policy-making process by participating in various business and industry forums and trade associations. We believe these activities help to create a positive understanding of, and appreciation for, the oil and natural gas industry and the critical role the industry plays regionally and nationally.

We file all public reports and information concerning the PAC with the appropriate Pennsylvania governmental authorities. In 2019, our political spending contributions through our PAC amounted to a total of $35,300.

7. Safety Leadership



Safety Excellence at Range

SAFETY IS OUR CORNERSTONE

Safety is at the foundation of everything we do at Range and is essential to our success as a business. We start each job with this perspective, beginning with the planning phase, and reinforced by Range field supervisors to their crews prior to work on every shift.

The Safety Department at Range is integrated into every aspect of our operations across the company. Professional Safety staff work alongside Operational Management at every level promoting the safety effort through tasks such as:

- Coordinating pre- and post-job meetings
- Evaluating what went well and analyzing where and how we can improve
- Collecting safety specific data
- Reviewing leading and lagging safety indicators
- Facilitating incident root cause analysis efforts

However, ownership of the safety process does not solely reside within the Safety Department. It is a process led by Senior Management and is embraced and upheld by all Range employees. Each level is accountable to the one above and responsible for the one below. This level of accountability and responsibility is achieved by a belief in and adherence to our corporate values. In Safety, like all that we pursue, we endeavor to achieve excellence.

Safety Process

The Safety Department conducts an annual review to update Range's Safety Roadmap, the strategy and plan guiding all key safety actions, improvements, and initiatives for the upcoming year. Working closely with operational leaders, the Safety Team looks at Range's operational risks, safety performance data, and key learnings from incidents and near misses, all of which are carefully tracked and recorded across all areas of operations.

Once reviewed, the Safety Team and Operations Management identify necessary mitigation actions to proactively address risks and prevent future incidents. Through our 'Plan, Do, Check, Act' process, all actions and initiatives generated by the Safety Team focus on the continual implementation and improvement of our Safety Management System.

The integration of safety improvement efforts is supported by Range's Safety Management System Leadership Team, made up of senior leaders in the company. The involvement of the Safety Management System Leadership Team instills the sense of importance placed on safety, which resonates through the organization. In addition, all Range operations have their own site-specific safety and emergency response plans that address any unique elements to each location.

In 2018, Range created the Incident Management Team (IMT), a hand-selected group of employees trained in Incident Command System (ICS) processes. All participants completed online training provided by the Federal Emergency Management Agency (FEMA) as well as general ICS training provided by Range. The IMT members continue to regularly participate in more extensive training and drills to improve our preparedness to handle all possible emergencies.

In the event of a major incident, Range has invested in a state-of-the-art Emergency Operations Center (EOC) which utilizes advanced technology for live video feed, GIS, media monitoring, presentations, meetings, situation status displays, press briefings, operational security, and more. The EOC allows Range to manage any situation or event across all Range locations and provides regional incident management teams with a full back-up center supported by the IMT.

Occupational Safety

Safety staff work collaboratively with every level of the organization to routinely update and improve the safety of our work processes. Through this collaboration, our safety programs are simplified to promote and facilitate their understanding and usability by our staff.

For more than eight years, Range has facilitated a Management of Change (MOC) program, which is a component of the Occupational Safety and Health Administration's (OSHA) Section 1910.119 – Process Safety Management of Highly Hazardous

Chemicals. Though Range is exempt from section 1910.119, as it more directly applies to plants and refineries, we made the decision to develop and implement a MOC process as a Best Management Practice given our commitment to safety.

The purpose of Range's MOC program is to more effectively implement change by:

1. Identifying when a change is necessary or already taking place;
2. Giving all affected parties the opportunity to communicate their thoughts and concerns; and
3. Developing a plan to carry out the necessary changes.

To date, the MOC process has led to a safer workplace for Range employees and added value across all aspects of our operations. By using this formal process to ensure all appropriate parties are involved, we have created an open forum, allowing concerns regarding proposed changes to be evaluated more thoroughly prior to final implementation.

The Range Safety Team also uses Intelex, an EHS Incident Management Application that facilitates the

Range Experienced Zero Incidents

In 2019, Range experienced zero incidents resulting in work restrictions or days away from work in our Range employee workforce.

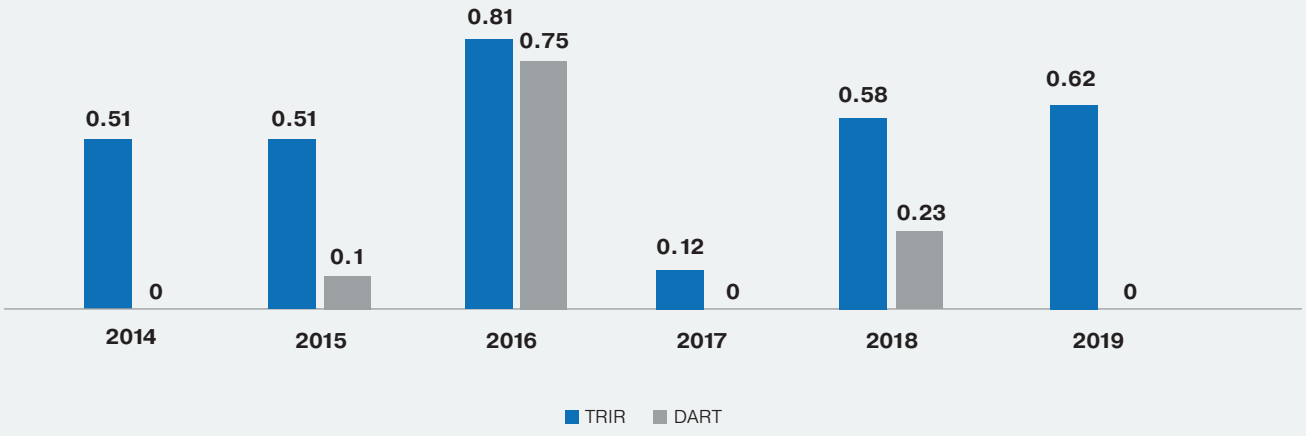
We have also created a tool for all Range employees to document hazardous conditions and "near hits," both on site and in our offices, through the Hazard Identification (Hazard ID) form on Range's intranet.

At Range, we strongly believe it is just as important to identify hazards in an office setting as it is in the field. Through our user-friendly process, Range employees can easily identify and address potential and imminent safety threats.

The information provided through Hazard ID allows us to collect data and track workplace conditions that could potentially lead to an injury or incident and prevent future occurrences from happening. Range's goal is to report near hits, warning signs that caused no damage or injury, and provide an opportunity to enhance the current system and prevent future injuries or incidents.

Range Employee Injury Trend

Total recordable incident rate (TRIR) and days away, restricted or transferred (DART) for Range employees



automation of reporting and tracking processes for incidents that occur through compound and single incident functions.

Through this application, our team can track not only the type of incident but also the root cause, the operation taking place, the length of time involved personnel was on duty, and for an injury – the body part that was affected. Intelex also allows for a cohesive tracking of incident reviews and investigations, as well as the corrective actions implemented, providing a repository of lessons learned.

Vehicle Safety

In 2019, Range introduced in-vehicle monitoring systems (IVMS) alongside our Smith Driver Training program as an extra measure of safety for employees with company vehicles. Since implemented, we have seen a 42.9 percent decrease in preventable vehicle incidents between 2018 and 2019. This program has helped Range drivers become more self-aware of their driving behaviors and cognizant of at-risk driving behavior while on the road. Our overall goal is to achieve zero preventable vehicle incidents.

The ability to analyze this type of data allows Range to proactively identify safety risks, educate employees and vendors prior to beginning work on elements that may result in an incident or injury and provide ways to mitigate such factors.

Workforce Safety Participation

Equipping our workers with the necessary skills and knowledge to perform their daily responsibilities safely is a key focal point of Range's safety management system. Over the last several years, we have worked to refine our development and training programs to provide Range employees with relevant, job specific trainings based on the degree of risk involved and the complexity of efforts to mitigate said risk.

In 2019, our workforce attended 3,179 hours of safety related trainings through our online Learning Management System, allowing individuals to learn at their own pace and convenience. In addition, Range conducts in-person classes, including defensive driver and Cardiopulmonary Resuscitation (CPR) training, to ensure our employees receive hands on instruction for critical health and safety skills that may be needed on the job.

Safety in Our Communities

The safety and well-being of the communities in which we operate are of the utmost importance to Range. Beginning with the planning, construction, and subsequent operations of Range sites, our Security and Safety Team work diligently to ensure the community is considered in all aspects of the process.

- In Pennsylvania, prior to any operations, the Security Team travels and monitors along the approved routes during the regular morning and afternoon commute times to determine when school buses travel through the area. Range then sets "curfew" times for all commercial motor vehicles traveling to and from our job sites, to ensure no commercial motor vehicle is on the road at the same time as local school buses. This is a voluntary suspension of activity in order to promote the health and safety of the communities in which we work, particularly the safety of our communities' children.
- Annually, the Range Operations, Safety and Environmental Compliance Teams hold Pennsylvania Safety Week, a week-long event dedicated to promoting a culture of safety, teamwork, and education. During this time, Range voluntarily suspends operations intermittently, and allows local first responders and external stakeholders to visit Range locations. Throughout the week, Range employees and our vendors hold events for subject matter experts to educate on the various jobs and roles and explain mitigation efforts in order to perform jobs safely and efficiently. The week ends with an Emergency Tabletop Drill which brings together our Incident Management Team, local first responders and local stakeholders in order to enhance our response to a large-scale incident.
- In October 2019, Range held its first-ever Louisiana Safety Week, which was attended by more than 200 local first responders, Range employees and contractors. The week-long event focused on operational processes and equipment with an emphasis

on safe work practices and procedures. Topics included three phase separation, spill response and best practices, workover rig operations, blowout preventer operations, confined space entry, chemical treatment, and fluid hauling. The week culminated with a high angle rescue exercise from the derrick of a workover rig executed by the Lincoln Parish and Ruston Fire Departments. The drill provided insight for first responders and contractors in the development of high angle rescue plans on oil and gas sites.

Contractor Safety

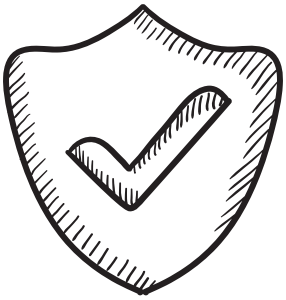
In addition to the safety of our employees, one of Range's top focus areas is contractor safety. With a large part of our field work being performed by contractors, in October 2018, Range upgraded its contractor management tool to utilize ISNetworld, an oil and gas industry platform that allows Range to better connect and evaluate the safety performance of industry vendors.

Through ISNetworld, Range benchmarks contractor safety performance with our industry peers and identifies potential areas for improvement.

Range requires all contractors and vendors working on a Range location to attend a safety orientation. In 2019, more than 12,000 individuals received Range's safety training from the Range Safety Team or through our Train the Trainer program.

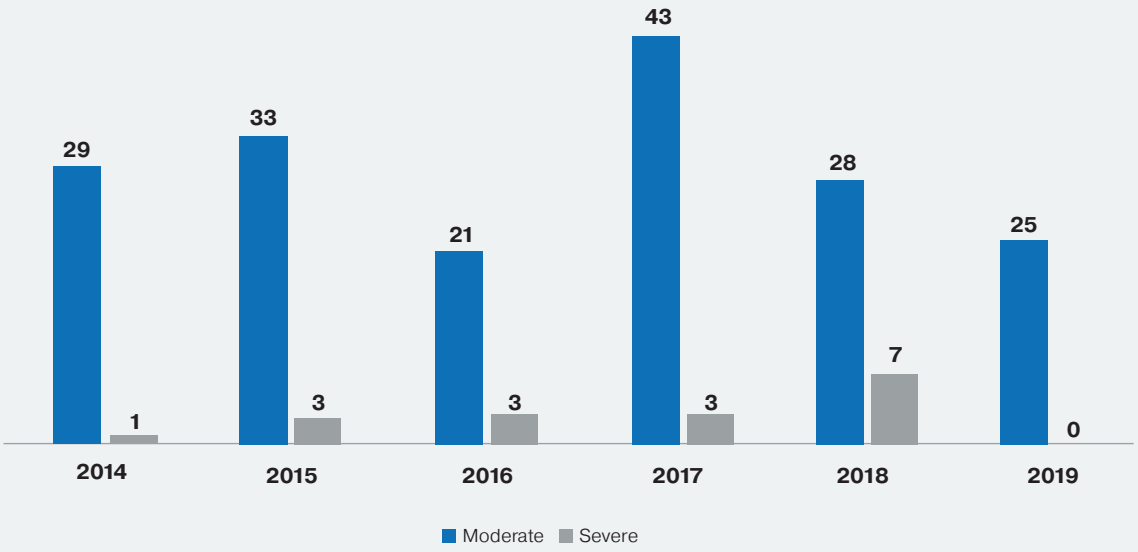
The orientation covers a comprehensive list of topics including but not limited to: Stop Work Authority, Range's Safety Policy, Fit for Duty, PPE, Hazard Communication, Simultaneous Operations (SIMOPS), Restricted Areas, Chemical Hazards and SDS, Equipment Operation, Speed limits, Backing Policy, Reporting Incidents, and Participating in Incident Investigations.

All personnel who have completed Range's safety training program receive a sticker for their hard hat to symbolize that they have been informed of Range's safety expectations and commitment to the environment and communities in which we work.



Contractor Recordable Injury Trend by Year

number of contractor recordable injuries by severity and by year



8. Climate Change

At Range, we view the emerging policy discussion around climate change as an environmental, economic, and social reality with material potential impacts for our world, our industry, and our communities.

We believe that the production and use of natural gas plays an integral role in addressing the risks associated with climate change and transitioning to a lower-carbon economy.

With this opportunity, we remain committed to responsible production in an economic and safe manner, while continuing to achieve industry-leading emissions reductions as part of our operations.

Governance – Board and Management Oversight

Board Oversight

Our Board of Directors incorporates climate change considerations in its oversight responsibilities, as climate change issues relate to business development decisions, risks, and opportunities that the Board reviews and acts upon as part of the regular course of fulfilling its duties. The full Board is responsible for the oversight of environmental risks and opportunities including those associated with climate change.

Information related to our environmental initiatives and progress towards our goals, including climate-related risks and opportunities, is provided to the Board on a quarterly basis by several sources. For example, the Environmental Compliance department reports to the Board with information about our progress on our sustainable performance metrics, including climate-related indicators like GHG emissions and water usage.

Our Legal team informs the Board about regulatory developments including climate change issues, such as state, federal, and global regulatory initiatives that may be relevant for our industry.

Our cross-functional Risk Management Committee, which comprises managers and executives from multiple business departments (Environmental Compliance, Finance, Investor Relations, Accounting, Operations, Health and Safety, and Legal) reports to our Board's Audit Committee on a quarterly basis and to the full Board annually. The Risk Management Committee regularly provides information on all manner of risks to the Audit Committee including those related to climate change.

Our Board regularly reviews macroeconomic trends and forecasts in relation to the natural gas market from our Finance department, including long-term projections of commodity prices, which include assumptions that incorporate climate change impacts. In addition, our Board, proactively seeks shareholder feedback on a number of topics, including climate change, as part of its annual shareholder outreach program.

The information received by our Board in relation to climate change is incorporated in their discussions and decision-making processes with regard to the development and the approval of Range's business plans and risk management policies, while our goals and objectives in relation to climate resilience and sustainability affect capital allocation decisions, including capital expenditures, acquisitions, and divestitures.

Management Oversight

Our management team understands the interdisciplinary nature of climate change risks and opportunities and applies the oversight and management of emissions reductions efforts through multiple channels.

This rounded approach allows our leadership to fully appreciate how several aspects of our business

are impacted by climate-related issues, including our efforts to reduce emissions, preserve water and meet other environmental compliance responsibilities, our capital expenditure decisions and future investments, the market for our products and services, the impact of legislative and regulatory developments, and our relations with our shareholders and investors.

Range's Senior Management Team establishes the expectations for the company's efforts in assessing and managing climate-related issues. Our various groups that are responsible for the monitoring and management of the multiple facets of climate-related risks and opportunities report directly or are led by members of the Senior Management Team.

Our Senior Management Team appreciates that climate change policy presents material risks and opportunities for our business and incorporates its assessment of these risks in the daily management of the company and its long-term business planning decisions.

As directed by the Board and Senior Management, the Environmental Compliance department is responsible for developing policies, procedures, and field guides for operations, providing training and education for employees, creating channels of communication, internal reporting of performance, and monitoring and auditing environmental practices.

Additional groups monitor climate-related matters as part of their daily operations. Under the leadership of our Principal Accounting Officer, a committee of officers and senior managers work across the business to manage each enterprise level risk and identify emerging risks, including climate change-related risks.

Our Legal department also regularly monitors issues associated with regulatory action or political advocacy. Finally, our Finance department assesses the impact of climate change on commodity prices when reviewing macroeconomic trends and projections that affect our industry.

Our Strategic Response to the Climate Policy Discussion

Our responsibility to act as a steward of the environment is a role we do not take lightly and guides everything we do.

Our Approach to Climate Change

Our approach to climate change management is an integral part of our broader business strategy, which includes the following elements:

- Commit to environmental protection and worker and community safety;
- Concentrate on our core operating area;
- Focus on cost efficiency;
- Maintain a multi-year drilling inventory;
- Minimize land disturbance and associated impacts by drilling longer laterals and using well pads to access multiple gas formations;
- Maintain a long-life reserve base with a low base decline rate;
- Market our products to a diverse set of end markets; and
- Maintain operational and financial flexibility

As part of our environmental stewardship strategy, we have invested and implemented aggressive GHG gas reduction programs and water management initiatives to ensure we are finding the cleanest and safest ways to operate.

As a producer of natural gas, which is a cleaner and safer alternative to other fossil fuels and projected to outpace oil and coal as a source of energy, we understand the inherent opportunity natural gas production provides us and our stakeholders.

Our concentration on natural gas and NGLs production in the Appalachian basin in Southwestern Pennsylvania gives us the additional advantage of some of the lowest production costs in North America, while operating under some of the highest state and local environmental and safety regulatory standards.

Our emphasis on maintaining a long-life drilling inventory and low decline reserve base reflect our long-term focus and strengthen our resilience in maintaining our cost advantage, while marketing our products to a broad customer base reaffirms our belief in natural gas' long-term advantage as a reliable and clean energy source with significant global demand potential.

Finally, maintaining operational and financial flexibility will allow us to adapt to the challenges that lie ahead. We are fully committed to the continued reduction of our GHG emissions footprint to position ourselves as a leader in the industry.

From 2011 to 2019, we have reduced our direct GHG production emissions intensity by 73 percent,* while reducing our absolute direct emissions by 33 percent* in just the last two years.

* Revised 2019 data. This data was submitted to the U.S. Environmental Protection Agency in accordance with their guidelines. An error occurred in the calculation process. The calculation and reporting has been corrected and the 2020 update will show a continued trend in emission reductions, as has been shown in Range's recent investor relations materials.

As we continue to improve efficiency and production techniques, our methane intensity will decrease. Additionally, as older well sites begin to decline, we work to close or upgrade sites with newer, more advanced technology. The replacement of older sources with newer ones is one of the most efficient and practical ways to reduce overall emissions.

Emissions Reduction Goals

As part of the continuation of our efforts and strategy implementation, we have set several short-term, medium-term, and long-term objectives specifically related to GHG emissions. Our medium-term goal is to achieve the objective of net zero direct GHG emissions by 2025 through the use of carbon offsets associated with reforestation and forest management. As an additional interim goal, we intend on further reducing our GHG emissions intensity by 15 percent relative to 2019 levels by 2025.

Emission Reduction Efforts

In June 2019, Range joined EPA's Natural Gas Star Program and will begin reporting emission reduction efforts beginning in 2020. In November 2019, EPA held a Natural Gas STAR and Methane Challenge Workshop in Pittsburgh. Range presented its liquids unloading program to reduce emissions and hosted a field tour of Range, drilling, completion and production sites to demonstrate emission reduction projects.

Scenario Analysis

Our strategy development is guided by the analysis of long-term trends and developments in energy markets. This type of review helps us assess our business strategy and market position relative to regulatory, market, technological, reputational, and physical risks associated with climate change.

For the purposes of our analysis, we use the publicly available scenarios produced by the International Energy Agency's (IEA) 2019 World Energy Outlook (WEO), which is currently one of the most widely recognized models contemplating the transition risks associated with climate change.

The 2019 WEO presents three main scenarios: The Current Policies Scenario, the Stated Policies Scenario (STEPS) and the Sustainable Development Scenario (SDS). Each scenario assumes a different set of changes in policy along with associated technological advances, market demand trends, and energy efficiencies.

The energy market projections of the scenarios extend to 2040, while assumptions around population growth and economic growth are the same across all three scenarios.

1. The **Current Policies Scenario** provides a baseline for the analysis and projects energy market conditions if the world continues its current trajectory without substantive policy changes, excluding the effects of stated ambitions and targets that have not been translated into operational laws and regulations.
2. The **Stated Policies Scenario** incorporates today's official policy intentions and targets in addition to policies and measures that governments around the world have already put in place.
3. The **Sustainable Development Scenario** identifies a pathway to fully meet sustainable energy goals in line with the Paris Agreement by holding the increase in global temperatures to well below 2°C and meeting the objectives related to access to universal energy and cleaner air. The achievement of these goals assumes a different mix of fuels and technologies that provide efficient and cost-efficient energy services.

Under the SDS, natural gas production peaks in the late 2020s and begins to gradually fall back to current levels by 2040. The Stated Policies Scenario and Current Policies Scenario both project continuous growth, albeit at differing rates.

These projections are similar when looking at regional production in North America. In fact, according to IEA's analysis, shale production in the United States is projected to drive a significant portion of global fossil fuel production growth, as has also been the case in the past decade.

More specifically:

- U.S. shale will be natural gas production leader globally
- U.S. shale will become net exporter of natural gas under all scenarios
- The use of natural gas for power generation, and in the industrial sectors, is associated with significantly lower GHG and other air emissions

While these scenarios do not serve as predictions of future events, they help us evolve our thinking about our strategic priorities and positions under a variety of policy circumstances. Based on our review of global energy market projections, it becomes evident that the natural gas industry sits at an advantageous

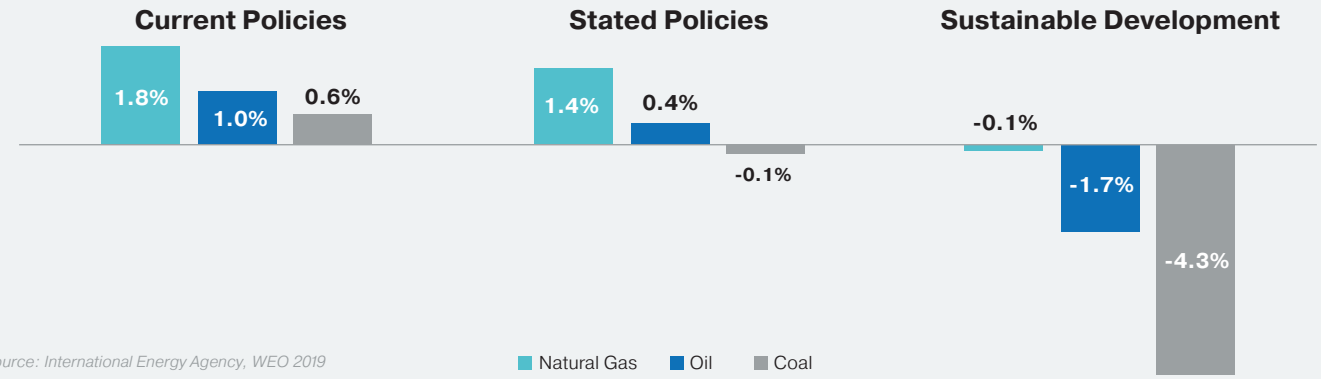
position relative to other fossil fuels under all three scenarios. The projected compounded annual growth rates for global natural gas production outpace oil and coal significantly under both the Current Policies and STEPS scenarios.

While natural gas production is projected to face a compounded annual decline of 0.1 percent under the SDS, the impact is significantly lower compared to the other two fuels. Under the SDS, the 2040 production for natural gas is projected to be approximately 2 percent lower than current levels, while 2040 oil and coal production levels are projected to be lower by 10 percent and 62 percent, respectively.

According to the WEO analysis, under the SDS, "although absolute consumption falls, natural gas gains market share at the expense of both coal and oil in sectors that are difficult to decarbonize, such as heavy-duty transport and the use of heat in industry. Even though natural gas-fired power generation declines, capacity grows compared with today as a consequence of the role of gas in providing power system flexibility."[1]

[1] International Energy Agency, 2019, World Energy outlook (2019), IEA, Paris, p. 179.

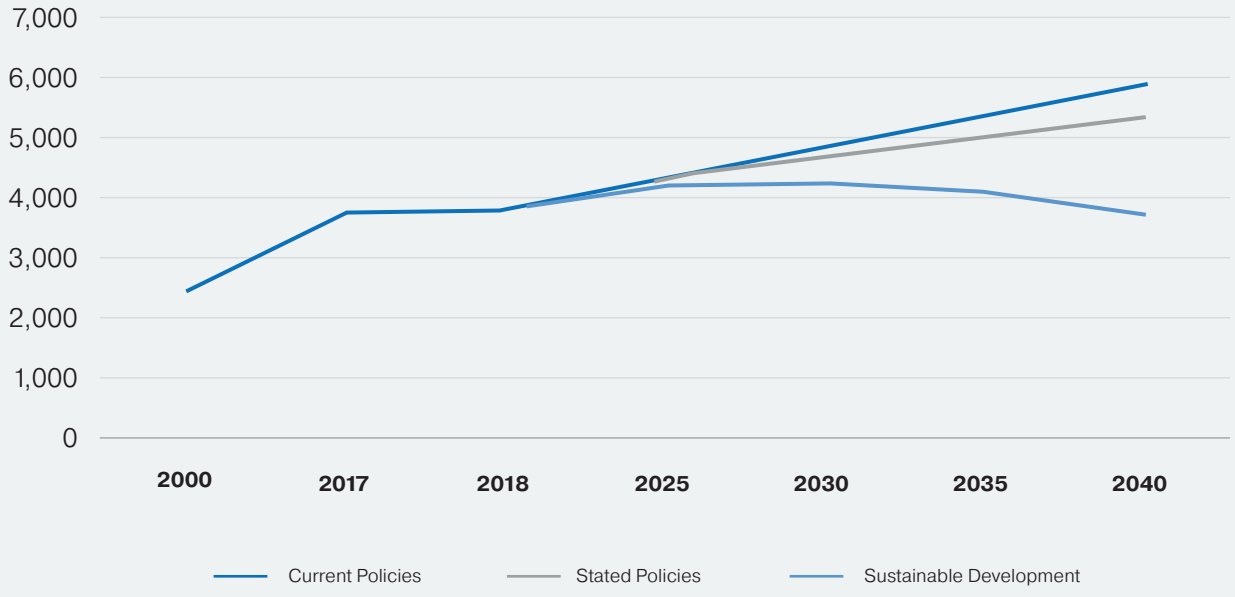
Compounded Annual Growth Rate in Global Fossil Fuel Production by Policy Scenario and by Fuel Type, 2018-2040



Source: International Energy Agency, WEO 2019

Global Natural Gas Production Projections by Policy Scenario

annual production volumes in bcm

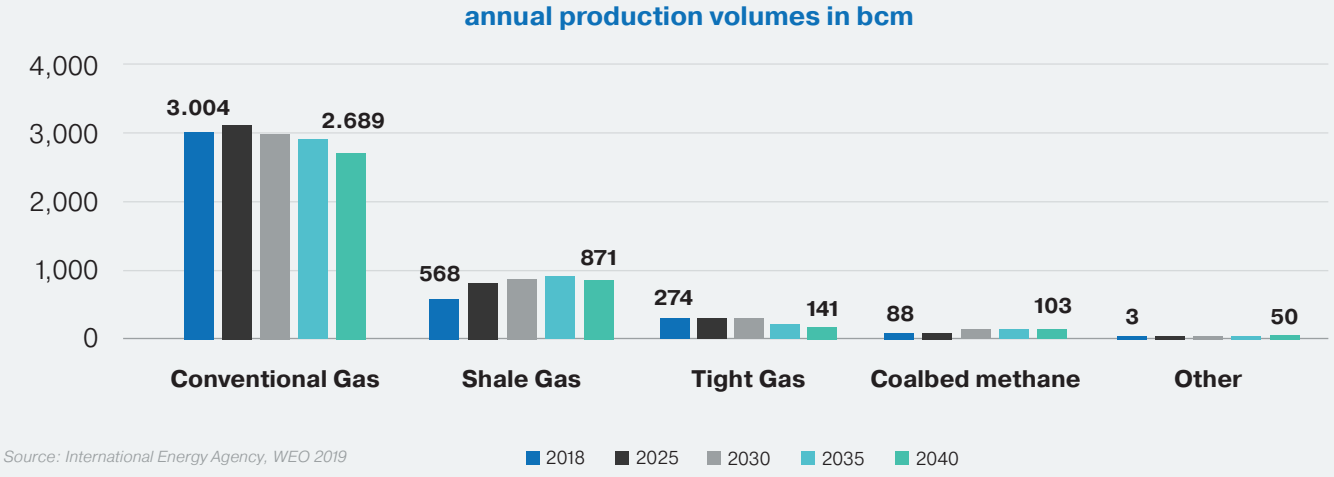


Source: International Energy Agency, WEO 2019

A closer look at the natural gas production projections by gas type shows that shale gas proves to be more resilient compared to conventional gas or tight gas. The Sustainable Development Scenario projections estimate 2040 shale gas production levels to increase by 53 percent compared to current production, while production for conventional and tight gas is projected to drop significantly.

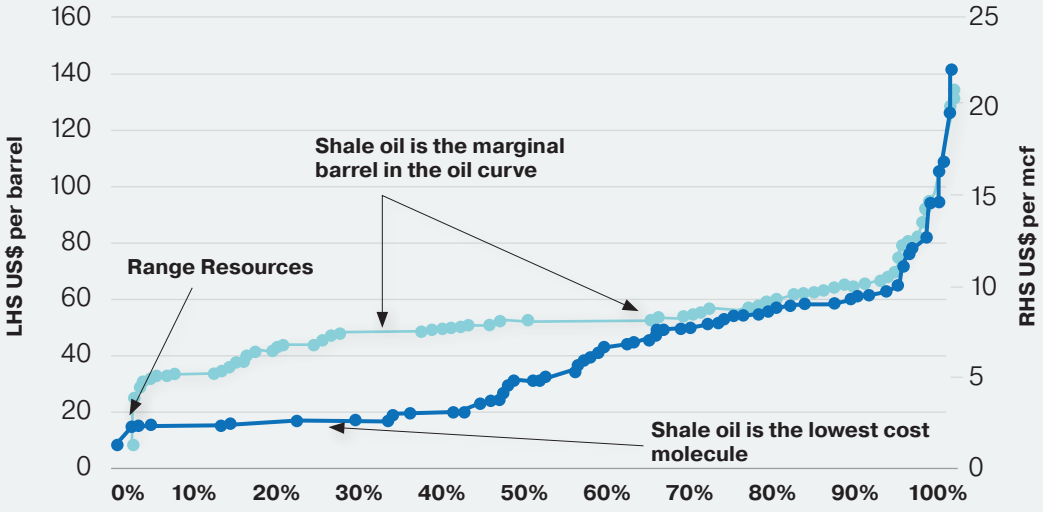
Despite these favorable projections, our industry faces challenges that will require us to maintain operational and financial flexibility, as suggested by our business strategy outline. Under the Sustainable Development Scenario, the price of natural gas remains at relatively low levels, which underlines the need for Range to maintain discipline and focus on cost efficiency. Our current costs of production and breakeven prices are among the lowest in the industry and should allow us to remain competitive under these various forecasted price scenarios.

Sustainable Development Scenario: Global Natural Gas Production Projections by Gas Type



Source: International Energy Agency, WEO 2019

Percentage of Cost that Breaks Even at a Given Oil Price (dark line LHS US$/bl) and Gas Price (light line RHS US$/mcf)



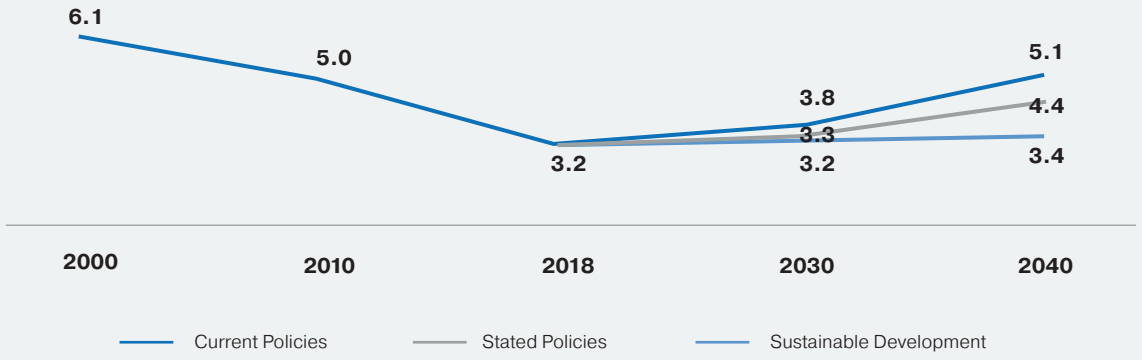
Source: Goldman Sachs, Top Projects 2020, May 2020

Under all three policy scenarios, North America is projected to become a net exporter of natural gas as demand is expected to grow more rapidly in other parts of the world. In line with our business strategy position to market our products to a broader customer base and different markets, the global market dynamics may require us to position our products and services for exports, including investments in liquified natural gas.

A recent study released by API and conducted by researchers at ICF found that using U.S. liquefied natural gas (LNG) rather than coal for electricity generation in China, Germany, and India produces on average 50.5 percent fewer greenhouse gas emissions in all base case scenarios for these three countries. These findings demonstrate the importance of natural gas for achieving global emissions reductions, especially in countries where coal makes up a significant portion of power generation. The study also found that transportation and shipping distance have the least impact on emissions levels in the supply chain (only 10 percent of the total GHG supply chain emissions), demonstrating that the U.S. LNG exports have a limited environmental impact.[2]

Natural Gas Price Projections by Policy Scenario

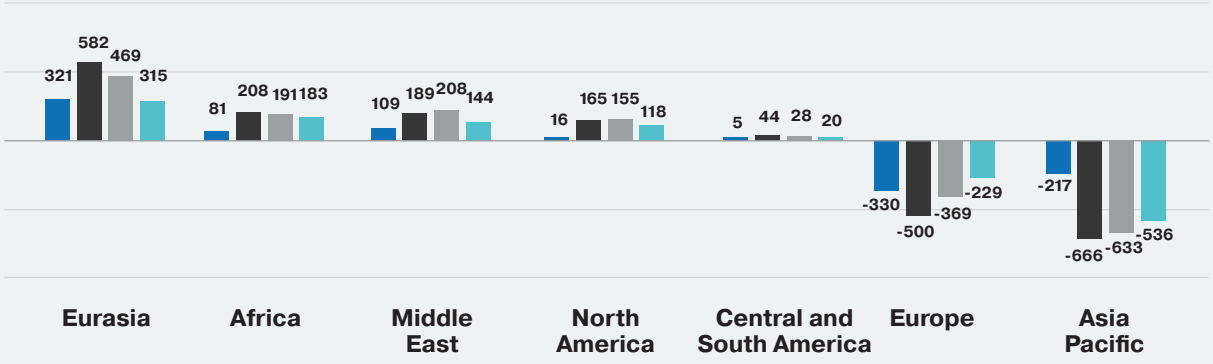
$/MmBTu (in real 2018 USD values)



Source: International Energy Agency, WEO 2019

Natural Gas Regional Trade Dynamics by Scenario Type

net export (import) position based on production minus demand volumes in bcm



Source: International Energy Agency, WEO 2019

2018 Actual | 2040 Current Policies | 2040 Stated Policies | 2040 Sustainable Development

[2] API-ICF, July 2020, "Update to the Life-Cycle Analysis of GHG Emissions for US LNG Exports Analysis," available at https://www.api.org/news-policy-and-issues/lng-exports/new-lifecycle-analysis-of-us-lng-exports

Our investments in the production of natural gas liquids (NGLs) will also likely prove to be more resilient compared to conventional crude oil. While NGLs are projected to face a slight decrease in production under the Sustainable Development Scenario, they are expected to gain a larger portion as a percentage of total oil production.

Further, there are additional benefits to LNG/ NGLs beyond resilience to climate change. The use of LNG/ NGLs for power generation, and in the automotive and industrial sectors, is associated with significantly lower GHG emissions and emissions of air pollutants, such as particulate matter, nitrogen oxide, and sulfur dioxide, relative to oil and coal.

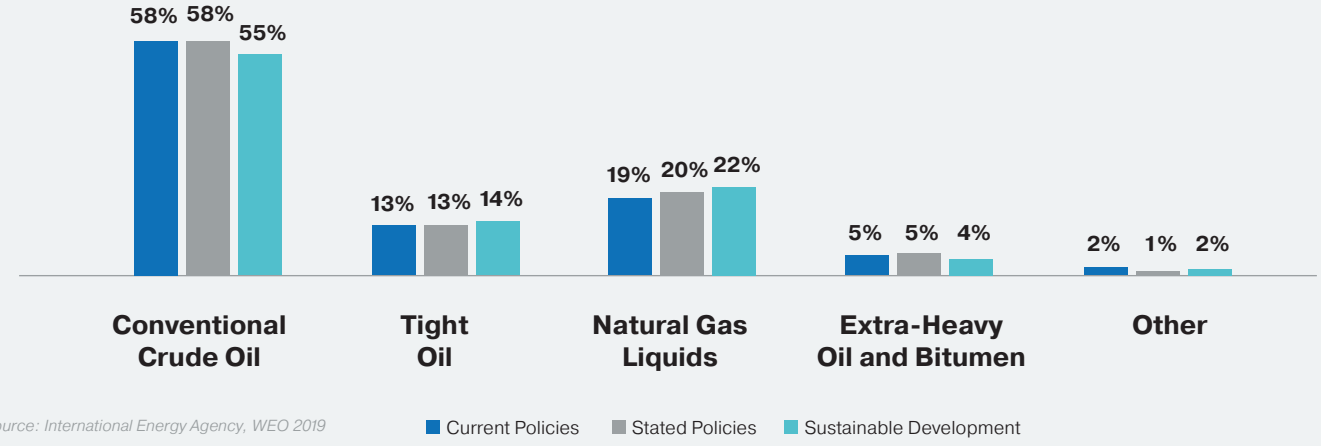
Moreover, NGLs are considered a transition fuel in emerging markets that can help prevent premature deaths related to illnesses attributable to household air pollution from cooking with solid fuels. There are currently 2.6 billion people without access to clean cooking facilities. IEA estimates a total of 2.49 million premature deaths in households due to lack of clean cooking in 2018.

Under the Sustainable Development Scenario – which envisions universal access to clean cooking by 2030 – reducing reliance on polluting fuels for cooking by 2030 reduces PM2.5 emissions by more than 80 percent compared to the Stated Policies Scenario.

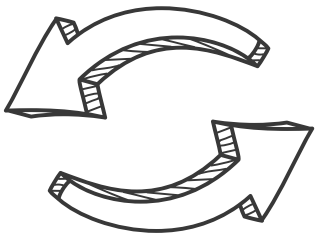
The adoption of policies favoring natural gas liquids will serve as a catalyst in offering access to clean cooking to hundreds of millions of households around the world and saving people's lives. Premature deaths due to household air pollution fall to 0.8 million a year in the Sustainable Development Scenario by 2050, compared to 1.8 million a year in the Stated Policies Scenario. According to the IEA, access to clean cooking facilitated by liquified petroleum gas also reduces overall greenhouse gas emissions by reducing methane emissions from incomplete combustion of biomass as well as by reducing deforestation.

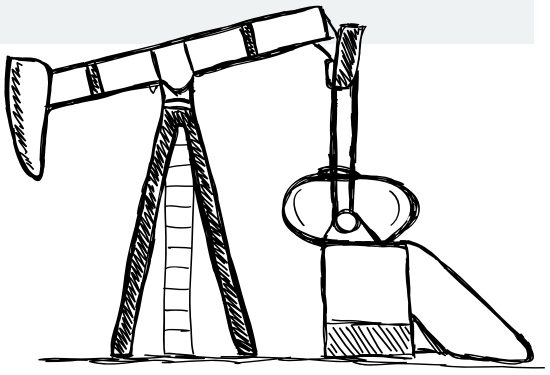
2040 Projected Global Oil Production by Scenario

production of each oil type as percentage of total global production

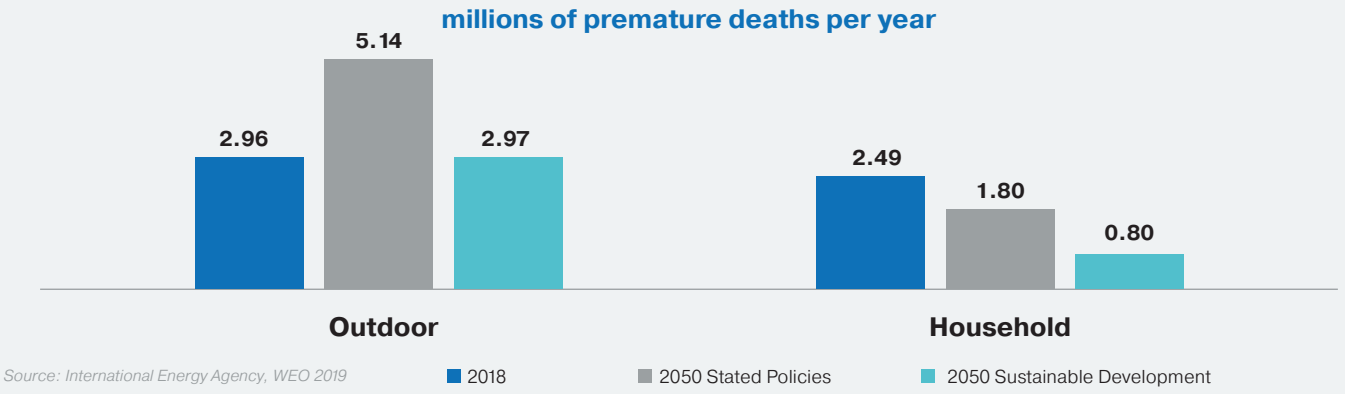


Source: International Energy Agency, WEO 2019





Global Premature Deaths Attributable to Air Pollution by Scenario, 2018-2050



Our analysis of climate change policy scenarios reinforces our commitment to our current business strategy. Each key element of our strategy aligns with the risks and opportunities presented by climate change and helps us maintain a competitive and resilient market position under the various policy scenarios discussed above.

Climate Change Risk Management

We have a robust enterprise risk management process for identifying, assessing and managing risk and monitoring risk mitigation strategies. Our multidisciplinary Risk Management Committee comprises managers from various parts of our organization – including Operations, Legal, Finance, Investor Relations, and Environmental Compliance – and regularly reports to our Senior Management Team and to the Audit Committee of the Board.

As part of our enterprise risk management process, the Risk Management Committee monitors risks related to the climate change policy discussion, including legal and regulatory risks, market risks, reputational and community risks, and the physical risks associated with extreme weather events or long-term impacts due to changes in weather patterns.

Addressing Climate Risks

Our review and assessment of potential risks related to climate change is followed by action to meet potential challenges. Our actions are guided by our strategy as outlined above. As we further formalize our risk management approach in relation to climate change, we will continue to evaluate potential actional plans for addressing risks and opportunities.

Range is fully engaged in public policy discussions and consultations among peers and other industry participants to identify solutions that protect the public good and allow our industry to continue to serve our communities with cleaner and responsible energy production.

We have taken significant steps to reduce our carbon footprint through a systematic and methodical approach that includes an annual review process of available options in terms of technological improvements and changes in design.

Importantly, we address risks related to carbon emissions by adopting a proactive approach that focuses on continuous improvement, which drives innovation encourages long-term thinking on how to achieve our emissions reduction goals.

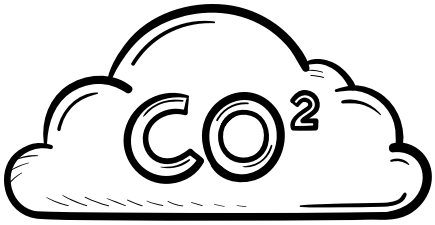
- These efforts include continued progress in accurately measuring, monitoring, and reporting on emissions.
- Our pioneering approach to water management constitutes a significant portion of our risk management efforts, as we engage in industry-leading practices that advance water preservation, water quality, and community safety.
- Our proactive approach to emissions reductions and water management helps us gain efficiencies, which keep us in alignment with our strategic objective to maintain a low cost of production to remain competitive and resilient during potential market disruptions.
- Our resilience is further bolstered by robust business continuity plans, which consider multiple sources of business disruptions, including severe weather events.

We work closely with our communities to address potential impacts and to communicate our commitment to environmental stewardship, which not only helps us protect our social license to operate but also strengthens our reputation in the communities we serve.

Climate Change Opportunities

In addition to risks, we believe that global climate change challenges present several opportunities for our business, as we believe our products and services can play an important role in the transition to a low-carbon economy.

- **Market Demand.** Natural gas is a significantly cleaner and more efficient fuel compared to other fossil fuel sources. According to the U.S. Energy Information Administration, for the same amount of energy, natural gas produces between 43 and 49 percent less CO2 emissions compared to coal-based fuels and between 26 and 27 percent less CO2 emissions compared to diesel and gasoline.[3] As demand for higher-emitting fuels may be reduced, we believe natural gas presents a safe and environmentally responsible cost-effective alternative.
- **Access to Capital.** From an investment perspective, Range seeks to differentiate itself among other natural gas producers. The state of Pennsylvania, where most of our production is located, has a well-managed and modern regulatory framework for producers, with some of the strictest state regulations. As production in the Marcellus basin is focused on natural gas (and not oil), our emissions are significantly lower compared to oil and gas producers in other parts of the country. Further, our cost of production is among the lowest in the industry, which renders our reserves more resilient and more profitable over the long term.
- **Industry Leadership.** We aspire to become the first natural gas producer to achieve net zero direct GHG emissions in 2025 through the use of carbon offsets associated with reforestation and forest management, as well as all other available and emerging offset methodologies. Along with our goal of net zero GHG emissions in 2025, we are committed to long-term continuous improvement in emissions reductions. We hope that by being an industry leader in addressing climate change challenges, we can yield significant benefits in our relationships with our employees, our communities, and our investors.
- **Operational efficiencies.** Our focus on environmental stewardship has resulted in significant operational efficiencies and cost savings both in relation to our emissions reductions efforts and our water management initiatives. For example, the installation of plunger lift systems and our leak detection and prevention processes and procedures have allowed us to save and sell gas that would have otherwise been emitted in the atmosphere. Our water recycling program not only allows us to reuse water, but, through our reliance on a network of transfer pipelines, we are able to reduce costs and associated emissions from the reduction of truck traffic.



Greenhouse Gas Emissions

Carbon emissions reduction has long been a core focus of our broader sustainability strategy that plays an important role in mitigating risk, while also creating significant opportunities to differentiate our business from other industry players to further demonstrate Range's long-term value proposition.

Our number one environmental goal is to lead our industry in emissions management. We strive for measurable reductions in emissions each year. To achieve our objective, we continue to invest in technologies, implement best-in-class emissions reductions policies and develop improved methods to reliably verify emissions through measurement.

Underscoring our commitment to continuous improvement, we annually review the designs and processes we have in place to identify new technologies, design changes, and processes that will allow us to reduce our direct emissions in an effective manner.

In our annual design and process change review, we consider the adoption of multiple emissions-reduction initiatives. As part of this process, we estimate the emissions reductions along with the capital, operating, and maintenance costs for each initiative. Using this information, we rank initiatives by marginal abatement cost, which allows us to select initiatives that will result in the most effective emissions reductions.

[3] U.S. Energy Information Administration, "Frequently Asked Questions," available at https://www.eia.gov/tools/faqs/

This annual review process allows us to analyze and address our emissions by source, type, and business segment, and during each part of the operating process and constitutes a key element of our long-term strategy to achieve our emissions reduction goals.

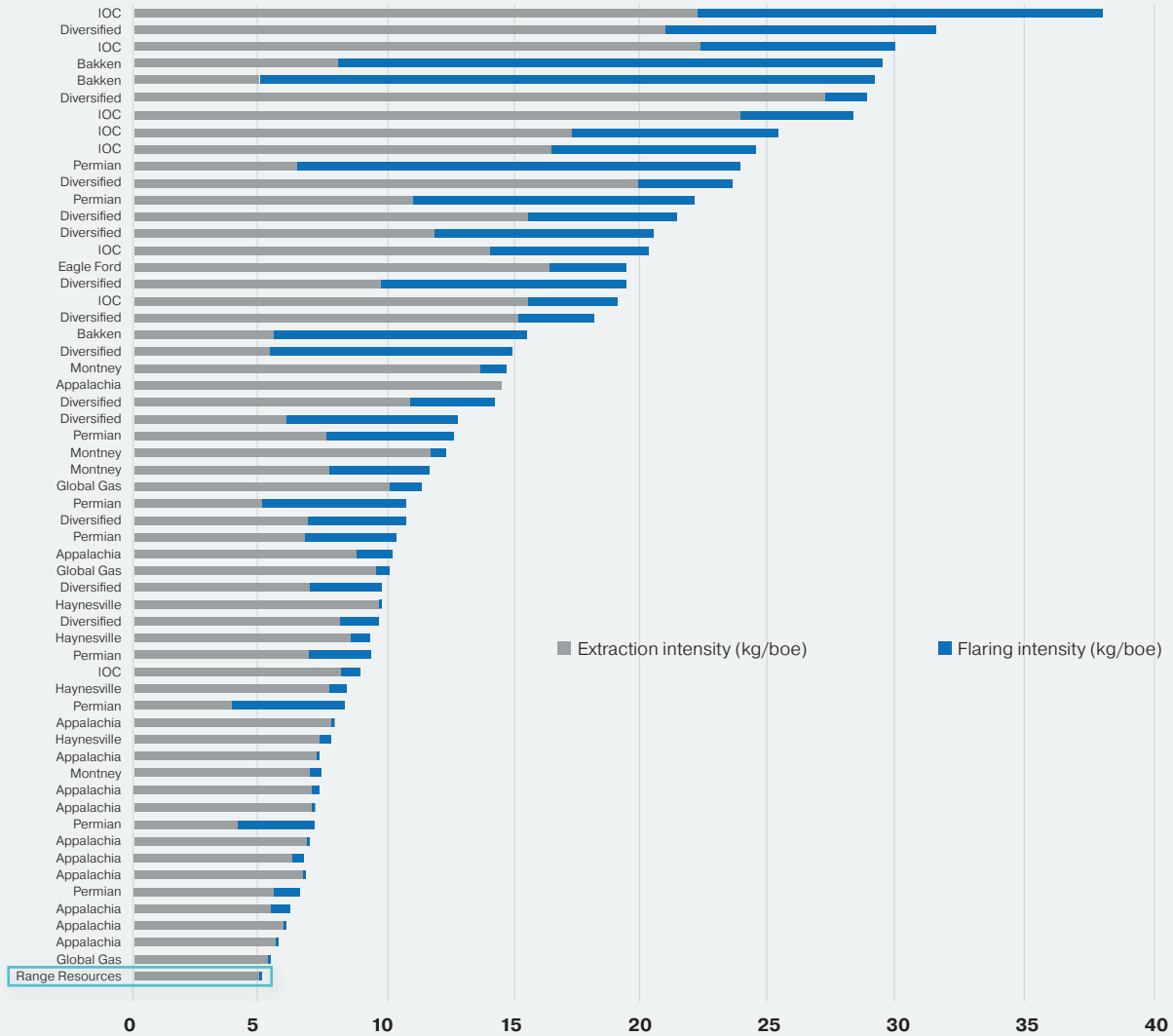
In addition to these activities, we are also considering the development or purchase of carbon offsets in order to achieve an interim target of net zero GHG emissions by 2025.

Our efforts in emissions reductions are paying off. Based on third-party data we received from Rystad Energy, an independent energy research and business intelligence company, we are estimated to rank among the lowest in CO2 emissions intensity in a group of 58 global natural gas and producers.

2018 Upstream CO_2 Emissions Intensity (kg/boe) – Peer Comparison

calculation of upstream CO2 production emissions and estimates of third-party gathering and boosting emissions for each operator

Universe: Range Resources and Anonymized Global Oil & Gas Producers

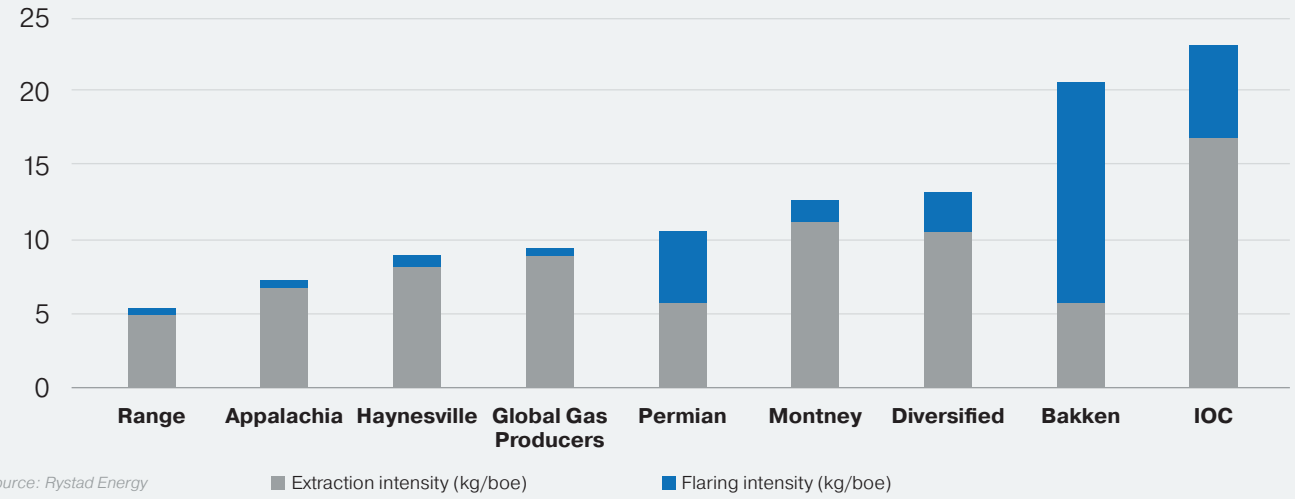


Source: Rystad Energy

2018 Upstream CO_2 Emissions Intensity (kg/boe) by Region

production-weighted average calculation of production emissions and estimates of third-party gathering and boosting emissions for each region

Universe: Range Resources and global Oil & Gas Producers



Source: Rystad Energy

Extraction intensity (kg/boe)

Flaring intensity (kg/boe)

When reviewing emissions intensity by operating region, Appalachia demonstrates an advantageous position, with the lowest emissions intensity figures compared to all other regions. Range ranks as a leader in Appalachia with below-average upstream carbon dioxide emissions intensity.

Legacy Initiatives (2009-2017)

There are several long-standing practices we introduced to our business very early on as part of our commitment to responsibly and proactively reduce emissions. For example, for more than a decade, Range's well site design has undergone an annual engineering review that carefully considers lessons learned from mechanical, electrical, and instrumental developments and gathered production data.

This assessment has enabled us to proactively enhance production equipment and refine the overall design of our well sites. Additional examples of our long-term commitment to emissions reduction practices include:

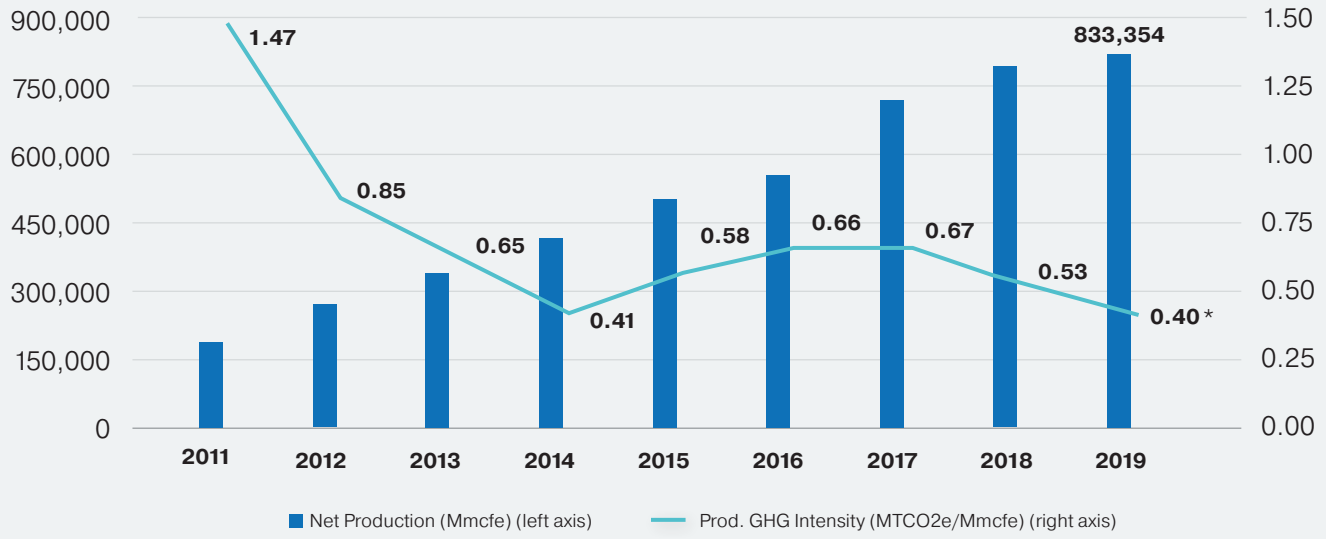
- In 2009, we launched the standardized multi-well pad design, reducing Range's surface footprint. We also made additional improvements in the electrical and instrumentation design, such as the use of available AC power, a centralized solar panel, and an integrated remote terminal unit with safety and emergency shutdowns.
- In 2010, we employed the use of burner systems to control volatile organic compounds.
- In 2012, new gas processing units (GPUs), vapor recovery units (VRUs), and low-bleed controllers became part of the standard facility design.
- In 2013, we made more than 30 design improvements to our multi-well pads. By way of example, the enclosed burner unit (EBU) was strategically repositioned and a more reliable thermal electric generator (TEG) replaced the solar panels in the standard design.
- From 2014 to 2017, we implemented additional changes to the standard design during the annual cycle to reduce emissions and increase performance, which has included upgrades to tank working vents, dump valves, and pressure relief valves.

These design improvements have significantly reduced GHG emissions and potential pollutants. Most importantly, the decrease in emission rates have occurred while production increased significantly. The result has been a substantial decrease in GHG intensity.

In the graph above, we show our path to reducing our production emissions intensity during the past decade. To normalize the data, the graph above is based on only emissions

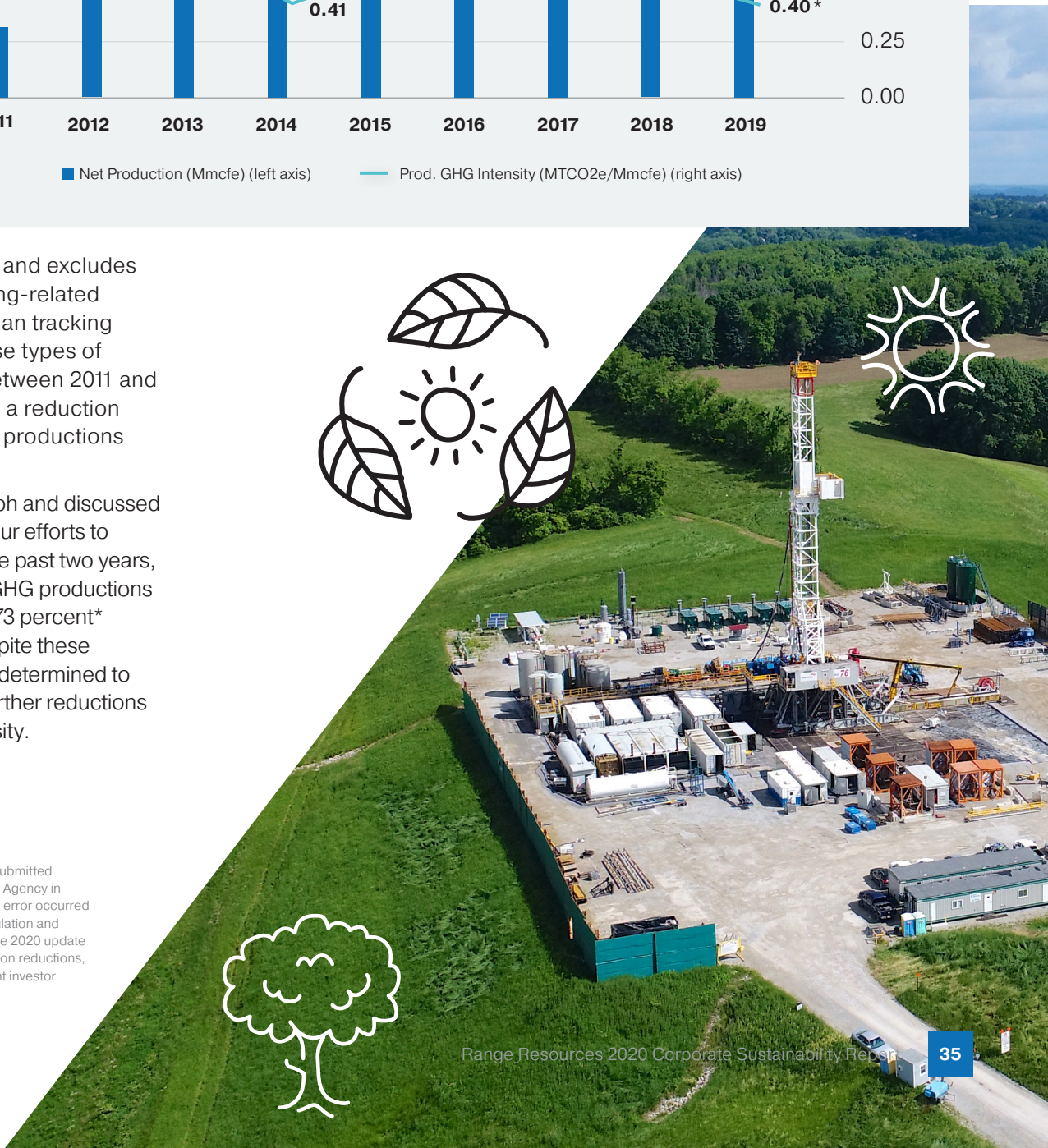
Range Resources Productions Emissions Intensity, 2011-2019

net production (in Mmcfe), productions-only emissions (in metric tons of CO_2e), and productions emissions intensity ($MTCO_2e$/Mmcfe)



related to production and excludes gathering and boosting-related emissions, as we began tracking and reporting on those types of emissions in 2016. Between 2011 and 2017, we experienced a reduction of 54 percent in GHG productions emissions intensity.

As indicated in the graph and discussed above, we continued our efforts to reduce emissions in the past two years, with an overall rate of GHG productions emissions intensity of 73 percent* from 2011 to 2019. Despite these achievements, we are determined to continue to push for further reductions of our emissions intensity.



* Revised 2019 data. This data was submitted to the U.S. Environmental Protection Agency in accordance with their guidelines. An error occurred in the calculation process. The calculation and reporting has been corrected and the 2020 update will show a continued trend in emission reductions, as has been shown in Range's recent investor relations materials.

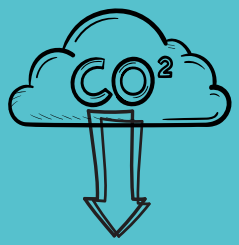
Recent Progress and Initiatives (2017-2019)

In the past two years, our absolute levels of GHG emissions decreased, while production increased, further reducing our GHG emissions intensity. Between 2017 and 2019, we achieved a 33-percent* decrease in our overall GHG emissions (including the emissions from boosting and gathering segment).

During this two-year period, we have achieved similar levels of reductions across all types of greenhouse gases, with a 21 percent* reduction in direct carbon dioxide emissions and a 44 percent* reduction in methane emissions. In 2019, our total GHG emissions stood at approximately 366,000* metric tons CO2e, down from 543,000 metric tons CO2e in 2017 and 473,000 metric tons CO2e in 2018.

In our annual design and process change review, we focus on the largest sources of emissions, so that we can prioritize our emissions reductions investments and initiatives based on the types of activities where we can achieve the largest amount of reductions for the associated costs. In the past three years, we paid significant attention to emissions stemming from energy combustion, other vented emissions, and fugitive emissions.

Between 2017 and 2019, we achieved a 33 percent* decrease in our overall GHG emissions (including the emissions from boosting and gathering segment).



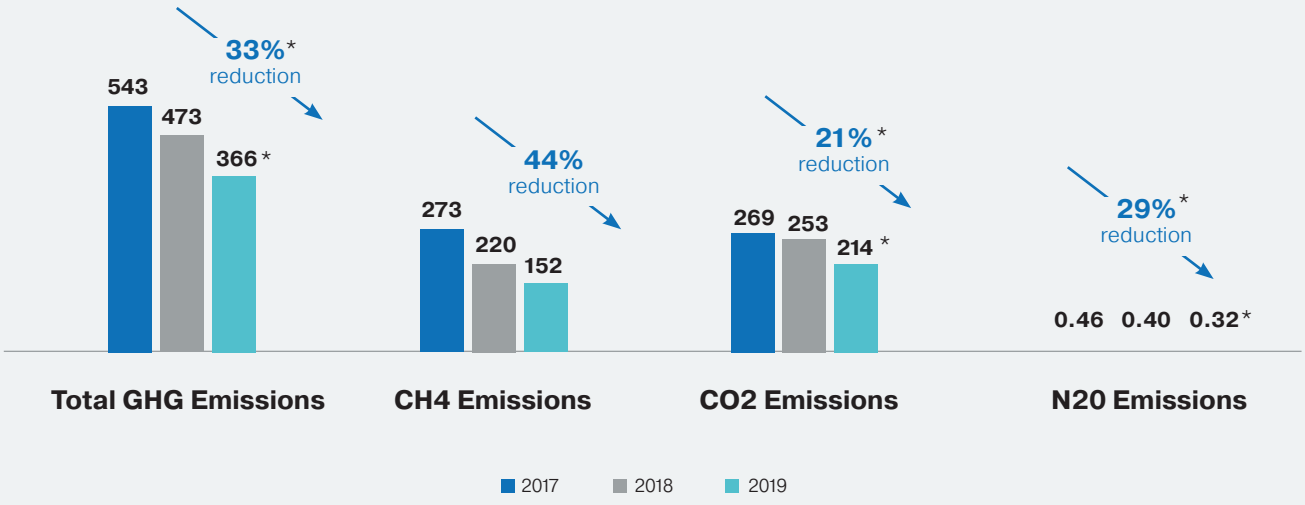
Between 2017 and 2019, emissions related to combustion decreased by 28 percent,* in part due to our use of natural gas instead of diesel for several of our combustion sources. Vented emissions also dropped by 58 percent between 2017 and 2019, primarily as a result of our installation of plunger lift systems and due to our zero emissions flowback initiative. The latter also contributed to a decrease in our emissions due to flaring in 2019.

In addition to design and process changes that reduce our emissions significantly, we look for opportunities that may result in smaller but meaningful reductions. For example, we continue to invest in the use of compressed natural gas (CNG) in our Pennsylvania based vehicles.

In 2019, we increased the use of CNG gallons used by our fleet by 84 percent, comprising approximately 54 percent of the total gallons used by our fleet. Our fleet's use of 89,694 CNG gallons in 2019 equals a reduction of total GHG emissions by 239 metric tons, the equivalent of planting 6,127 trees or removing 50 cars from the road.

Range Resources Greenhouse Gas Emissions by Type of GHG, 2017-2019

(in thousands of Metric Tons CO2e)



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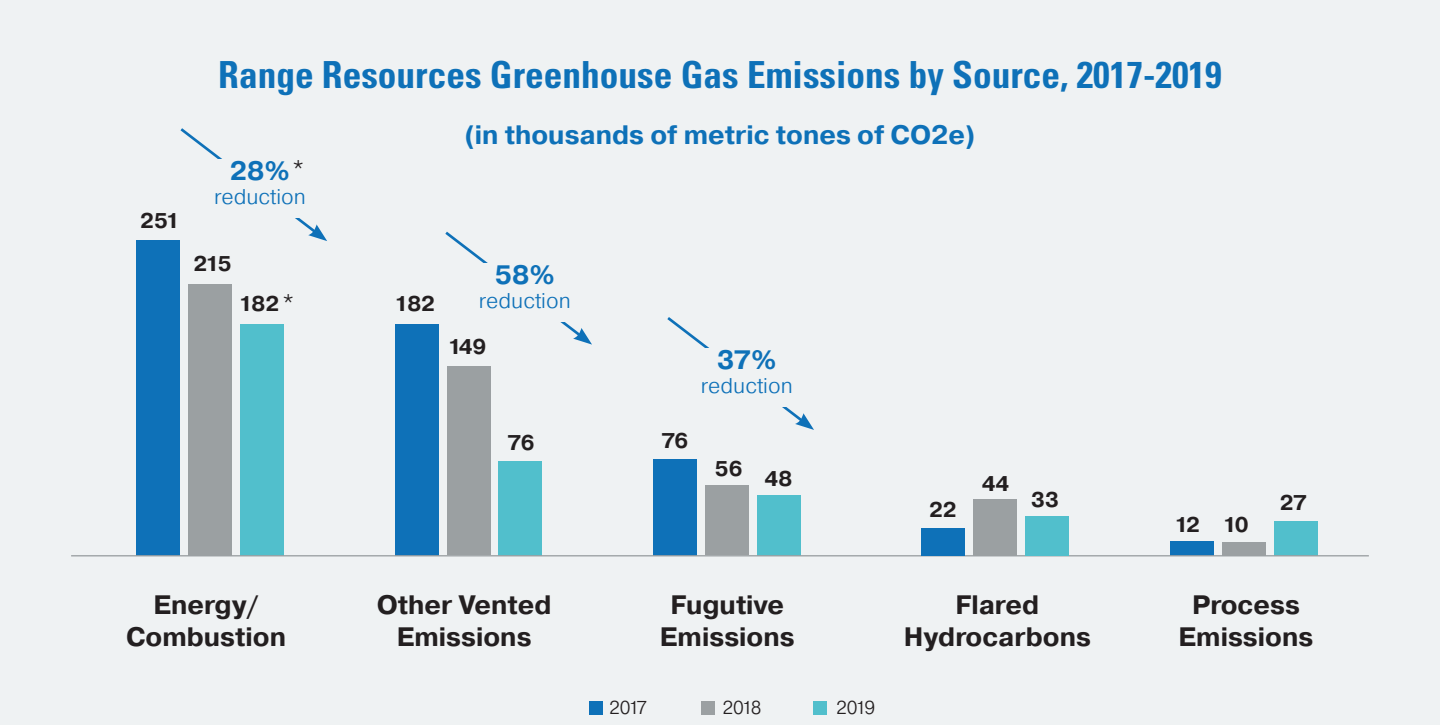
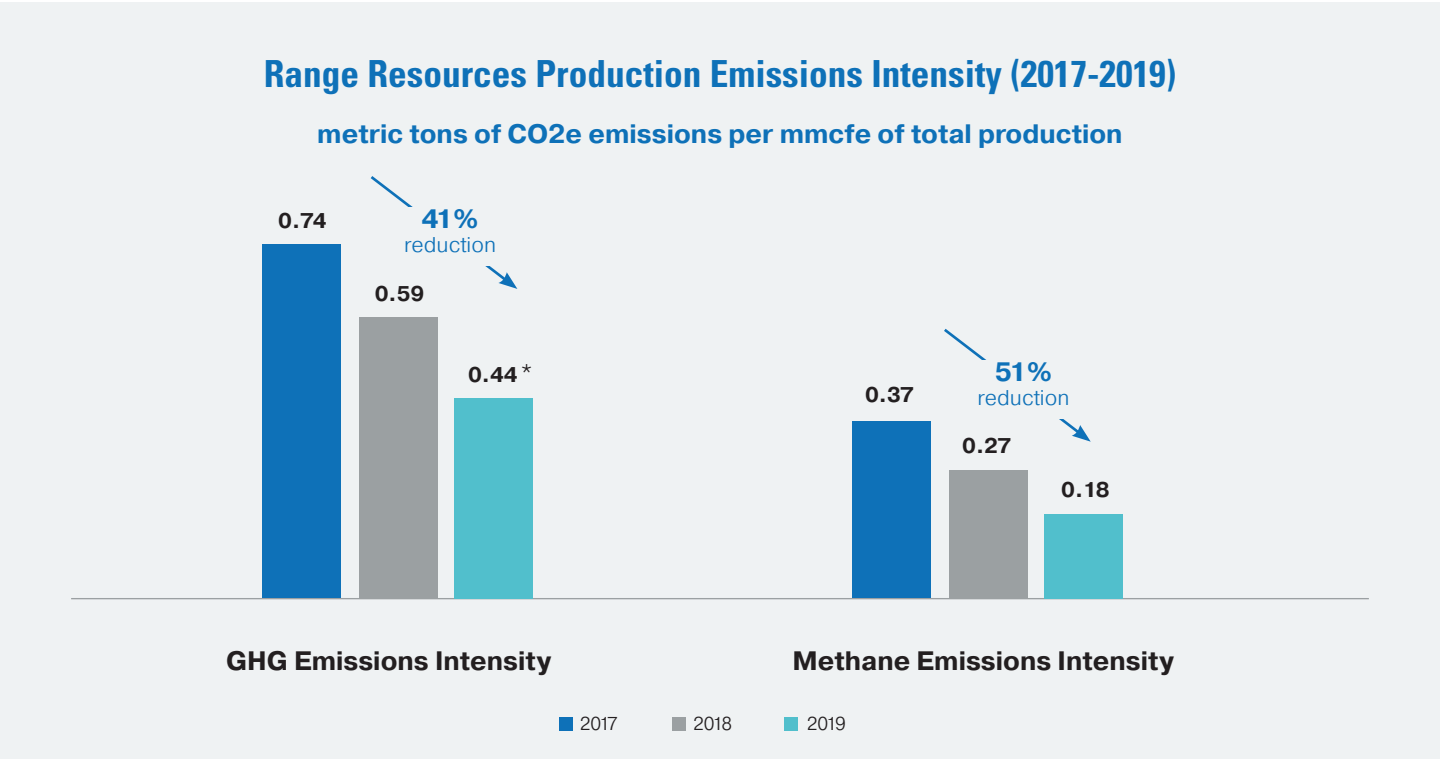


As mentioned above, our overall emissions intensity (including emissions from boosting and gathering) improved by a larger percentage than our absolute emissions, as our production increased over this timeframe. Our GHG emissions intensity was cut by 41 percent* from 2017 to 2019, while our methane emissions intensity was reduced by 51 percent during the same period.



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Measuring methane intensity as the volume of methane emissions as a percentage of the volume of total gas produced, in 2019, our estimated methane intensity was 0.04 percent of production, down from 0.06 percent of production in 2018 and 0.09 percent of production in 2017.

In 2019, we invested in new technologies and implemented several emissions reduction initiatives that are estimated to reduce our total GHG emissions by approximately 20 percent. Our most recent initiatives primarily address emissions associated with flaring, venting, stationary engines, liquid unloading, tanks, heaters, reboilers, and completion engines. Our top 2019 emission reduction initiatives include:

- **Plunger lift installations** in wells in the northcentral Pennsylvania region. The plunger lift technology is a cost-effective way to remove liquid buildup from the wellbore, which eliminates blowdown operations or venting. We estimate this initiative will yield a 95-percent reduction in methane emissions by the end of 2020. The reduction in venting is also expected to increase revenue by approximately $25 million over a five-year period, as we sell the gas that would have otherwise been emitted to the atmosphere.
- **Zero emissions flowback turn-on procedure.** Before actual production, during the flowback phase, the well produces a mixture of water, sand, condensate, and natural gas. During this phase, our goal is to clean the well bore and manage the flowback fluid while keeping the well open and producing. The zero-emissions flowback turn-on procedure eliminates the need to vent hydrocarbons to flowback tanks early in the flowback process and is estimated to reduce associated emissions by 98 percent by the end of 2020.
- **Electric motor-driven vapor-recovery unit compressor.** This technology replaces small natural gas-fired engines with electric motors, significantly reducing pollutant emissions (CO) and direct GHG emissions.
- **Vapor recovery tower with white tanks.** The adoption of this technology reduces storage tank and condensate loading emissions, as well as conventional pollutant emissions (primarily VOC).

Electric Frac Fleet

Several of our emissions reduction initiatives related to combustion activities have a direct impact on our energy use during operations. For example, our continued initiative to replace diesel with natural gas throughout our operations has resulted in significant energy efficiencies in addition to emissions reductions.

One of the first companies to deploy this kind of technology in the Appalachian Basin, Range recently partnered with U.S. Well Services for an electric frac fleet utilizing next-generation Clean Fleet® technology. The fleet will be 100 percent powered by natural gas and have its own turbine generators on the wellsite.

According to independent, third-party studies, the Clean Fleet® technology is proven to successfully reduce emissions by 99 percent, dramatically decrease sound pollution, and generate operational cost savings upwards of 90 percent of fuel costs.

Our new electric frac fleet will not only improve capital efficiencies, but it will also help the company operate in a cleaner and quieter manner in Appalachia. In recent years, we have increased the use of natural gas as a fuel source, in conjunction with dual fuel and electric powered fracturing operations, to a total natural gas fracturing fuel volume of 270.2 Mmcf or Mmbtu in 2019.

Ongoing Efforts and Future Strategy

In 2020, we are advancing several implementation changes and new technology adoptions, which will further improve our performance.

- **LDAR Surveys.** We have increased our LDAR surveys from twice a year to once every quarter, in line with our commitment to improved leak detection and elimination. While we have significantly reduced our Component Leak Ratio and maintained it at considerably low levels during the past three years, we believe that our ongoing efforts will help us further improve in this area. The surveys are completed by internal Range Environmental Compliance staff who work with Operations staff to quickly respond and remediate any leaks.
- **Investments in Environmental Compliance.** We are making investments in technology used by our EC Department to drive efficiency by simplifying data entry and reducing time spent on paper documentation. The creation of app-driven forms allows for electronic data input to be written back to our environmental software, which can create on-demand reports.
- **Technology Investments.** As part of our annual design review, we plan on making investments in technologies, which will help us further reduce our direct emissions, including the following:
  - Electric fracturing equipment;
  - High-efficiency burners on heated flash separator and dehydration reboiler;

Year	Total Wells	Total Reported Components	Total Leaks Identified	Component Leak Ratio
2015	1,072	380,489	2,645	0.007
2016	1,143	411,275	1,048	0.002
2017	1,251	556,535	698	0.001
2018	1,315	594,437	610	0.001
2019	1,364	638,690	702	0.001

  - Dehydration electric glycol pump; and
  - Diesel fuel additives to increase efficiency and reduce emissions.

- **Carbon Offsets.** Our carbon offset strategy has several components focused on forest carbon projects. We have initiated reforestation projects such as planting trees on Range-owned lands in Pennsylvania and developing forest management plans to increase tree and carbon growth within Range's wooded acreage. In addition, we are exploring a partnership with a conservation group to purchase, conserve and manage additional forested lands and increase carbon growth.
- **Improved Emissions Measurement.** One of our longer-term emissions reduction strategies focuses on improved emissions measurement methods. To improve the accuracy of our emissions monitoring, we are considering the introduction of new methodologies and advanced technologies, such as ground-level air monitoring, tracer surveys, as well as aerial surveys.

Trees are carbon machines!

Through photosynthesis, trees absorb CO2 from the atmosphere and store it as they grow in their branches, leaves, trunk and root systems. A forest carbon offset is defined as a metric ton of CO2e that is stored within the forest and is used to offset emissions. Forest carbon offset projects are developed using recognized voluntary or compliance carbon standards.

Flared Gas

We have made significant efforts in the past few years to minimize the need for flaring hydrocarbons, including the use of enclosed burner units and additional safety precautions. Several of the initiatives discussed above specifically contribute to the reductions of flaring activity, including the following initiatives:

- Starting in 2020, we use electric pumps on glycol dehydrators as part of our standard design, to reduce emissions that would be required to be combusted (flared).
- Heated flash separators coupled with vapor recovery equipment are used on condensate-producing sites during flowback operations to reduce the need for flaring.

The table below shows the total quantity of hydrocarbons flared and their associated emissions from 2017 to 2019. The emissions from flaring increased with higher production until the initiatives were implemented in 2019.

Even with a 35-percent reduction in the amount of gas flared in 2019, emissions due to flaring as a percentage of total GHG emissions only decreased slightly because of the significant reductions achieved in relation to emissions stemming from several of our larger sources of GHG emissions, such as combustion, venting, and fugitive emissions.

	2017	2018	2019
Volume of hydrocarbon flared in PA (mmcfe)	231.05	391.40	253.64
Volume of hydrocarbon flared in LA (mmcfe)	15.14	123.68	82.82
Total quantity of hydrocarbon gas flared (mmcfe)	**246.19**	**515.08**	**336.46**
Range GHG Emissions due to Flaring (MT CO2e)	**21,842**	**43,765**	**33,054**
Contribution to Overall GHG Emissions	**4.0%**	**9.2%**	**9.0%***

* Revised 2019 data. This data was submitted to the U.S. Environmental Protection Agency in accordance with their guidelines. An error occurred in the calculation process. The calculation and reporting has been corrected and the 2020 update will show a continued trend in emission reductions, as has been shown in Range's recent investor relations materials.

9. Environmental Stewardship

Biodiversity and Ecosystems

As part of our commitment to environmental stewardship, we make every effort to minimize our impact on the land where we operate. Through the employment of horizontal drilling technology, with some of the longest laterals drilled in the Marcellus Shale, we can access large volumes of natural gas with fewer wells and less surface land disruption.

At the same time, we comply with state and regulatory requirements to identify biodiversity and ecosystems risks in our operations, and we work with the relevant agencies to develop action plans and take avoidance steps when necessary.

Range's Civil & Environmental Engineering Department and our Environmental Compliance Department are responsible for the oversight and management of issues related to biodiversity and impacts on land. Both groups report to Senior Management and our Board to ensure complete oversight of these efforts.

Biodiversity Risk Assessments

Before work begins on a well, and as part of the permit application process, we determine whether the well site or access road is located near the habitats of any rare or endangered flora, fauna or animal species. If we identify any such habitats, we assess potential impacts and consult with the applicable agencies to develop action plans for avoidance measures or mitigation plans, as deemed necessary.

Avoidance, Minimization, and Restoration

We work closely with state and federal agencies to develop action plans to manage biodiversity and ecosystems risks in accordance with the following criteria:

- **Avoid:** As we consider our biodiversity impacts in the early stages of each project, we prioritize the avoidance of impacts through the careful selection of our well sites and the use of lateral drilling to reduce our surface land disruption.
- **Minimize:** To the extent that some impacts cannot be completely avoided, we take steps to minimize impact. Examples include adjusting operations to minimize seasonal impacts to flora and fauna, noise reduction measures, and the limitation of the duration of earth disturbance.
- **Restore:** When surface land disturbance is necessary, we work to ensure that restoration activities occur promptly and thoughtfully. We coordinate with our landowners and seek to leave our work areas as good as or better than we found them. Achieving permanent stabilization in the form of revegetation is our ultimate goal, including establishing beneficial native and pollinator species when possible.

Ambient Air Monitoring Program

To further our commitment to leading the industry in sustainable practices and public health transparency, Range voluntarily launched an ambient air monitoring program in Washington County, Pennsylvania to provide timely data and information to the public.

Over the course of two years, Range collected and documented air quality data throughout all phases of development and operation of a Marcellus Shale well site near an elementary and high school campus.

In 2019, Range published the first-of-its-kind report, which included independent, third-party analysis of the data collected, and found there to be no air quality impacts of potential public health concern.

Through our regular community outreach, we heard from residents near our Augustine well site in Pennsylvania and voluntarily launched the ambient air monitoring program at this well site. All measurements are being collected using equipment and procedures in accordance with U.S. Environmental Protection Agency methods.

Third-party consultants have placed six monitors around the well site, and they are collecting the data which is being sent to their certified lab for analysis. The latest data is made publicly available and can be found at rangeresources.com/air-monitoring.

Air Pollutant Emissions	2017	2018	2019
NOX (in metric tons)	4,177	3,733	3,327
VOC (in metric tons)	3,314	3,176	3,182
PM10 (metric tons)	73.0	68.9	65.6
SOX (metric tons)	9.7	9.6	10.0
Net Production (Mmcfe)	733,231	803,408	833,354

Conservation

Conservation is a top priority for Range and there are a number of community-based partnerships the company supports to protect and restore natural habitats of local wildlife in and around the regions where we operate.

For example, in collaboration with the California University of Pennsylvania's Fish and Wildlife Program, Range has created the Habitat Enhancement Program which is aimed at supporting healthy populations of pollinator species like the monarch butterfly. The program is available to landowners of property currently or previously utilized by Range for development activities. This is part of Range's normal restoration program if the landowner wishes to participate. To date, more than 48 acres of land have been enrolled in the program.

In 2014, we partnered with the National Wild Turkey Federation to enhance areas disturbed by our earlier Marcellus operations to create an attractive wildlife habitat. As part of this project, we repurposed 33 acres that had been partially used for natural gas development. The resulting habitat includes planting that is an attractive mix for deer, wild turkey, and other wildlife.

Air Quality & Other Emissions

As part of our emissions reduction strategy, we place a significant emphasis on non-greenhouse gas pollutants, and in turn, several of our emissions reduction initiatives involve volatile organic compounds (VOC), nitrogen oxides, particulate matter, and sulfur oxides. Our annual design and process review includes the assessment of technologies and investments that can help us reduce other air pollutants.

The table above illustrates the changes in non-greenhouse gas pollutants and the effect of the design changes. Over last three years, non-greenhouse gas emissions per mmcfe net production decreased.

Our initiatives that result in emissions reductions of other air pollutants include the following:

- We use a closed vent system on both condensate and produced water storage tanks at newer condensate producing sites to minimize VOC emissions.
- We install and use white-colored storage vessels at condensate producing sites to reduce VOC losses.

- We use an electric-powered frac fleet when practicable.
- We use electric-driven motor compressors in place of combustion driven units.
- We use electric glycol circulation pumps on dehydration units.
- As part of the drilling process, VOC emissions rates are relatively low and are combusted as required for safety by using a flare with a continuous pilot.

Spill Prevention

We go to great lengths to implement industry-leading spill prevention measures to protect the people and the land where we operate. Spill response and prevention are important priorities at Range.

Like every aspect of our environmental sustainability efforts, our policies, processes, and procedures related to spill prevention and spill response is a commitment that starts at the top of our organization and extends down to every level, department, and function of the company.

8 Component Process

Our ultimate goal is to minimize and eliminate the potential for environmental incidents and closely adhere to our Environmental Incident Response Compliance Plan, which outlines strict protocols to prevent and effectively respond to incidents in the event they occur. This plan includes a rigorous eight-component process:

1. **Awareness:** All employees and contractors are expected to act in accordance with this Plan, which supports Range's philosophy to be "good stewards for our shareholders and the environment."
2. **Recognition:** Employees and contractors are expected to recognize environmental incidents.
3. **Assessment:** When employees or contractors cause, observe, witness, or become aware of situations involving real, potential, or alleged incidents, they must review the situation and make early assessments.
4. **Immediate Response:** If an environmental incident has occurred, immediate response actions are necessary to reduce the real or potential impacts. Consistent with Range's contingency plans, such as PPC and SPCC, employees and contractors are expected to take standard initial steps following an incident.
5. **Reporting:** Every environmental incident, without exception, must be reported to the Environmental Compliance Department. The Environmental Compliance Department will make notification to external regulatory agencies as appropriate.
6. **Remediation:** Consistent with Range's commitment to serving as a good steward of the environment, proper remediation of spills, leaks, or releases is required.
7. **Investigation:** Whether coordinated by the Environmental Compliance or the Safety Department, all involved staff and contractors must communicate openly and participate actively to ensure that all relevant facts and details are captured by the process, and that corrective actions are established, as needed.
8. **Analysis and Prevention:** On at least a monthly basis, the Environmental Compliance Department reviews statistics of Environmental Incidents to identify trends or recurring issues. Based on these findings, the Environmental Compliance team may make recommendations to affected or involved departments.

The designated operations groups across the organization are responsible for maintaining oversight of their activities as part of our rigorous compliance plan. Importantly, in the event that an accidental spill occurs, highly trained members of our in-house Environmental Compliance department work with key operations groups to rapidly respond to and coordinate spill management and remediation efforts, mitigating any environmental damage or safety concerns to the maximum extent possible.

In 2019, the total number of reportable releases greater than or equal to 1 bbl was 59 percent lower compared to 2017 levels.

Range also leverages state-of-the-art technology and industry-leading practices to satisfy regulatory requirements and minimize potential impact of any accidental spills. These processes and protocols include secondary containment, containment under refueling, thorough inspections of containment and facilities, and storage level guidelines to name a few.

In many instances, we go above and beyond industry requirements. For example, we analyze each location and utilize extra containment in areas where an issue has a higher potential to occur, conduct additional well development pipeline inspections and install enhanced impoundment liner systems, among other key practices.

Our stringent reporting requirements help us ensure that we are immediately made aware of all incidents so that we can properly report and address incidents.

This process also ensures accurate statistics leading to reliable metrics and effective, ongoing enhancements to our prevention and response processes and protocols.

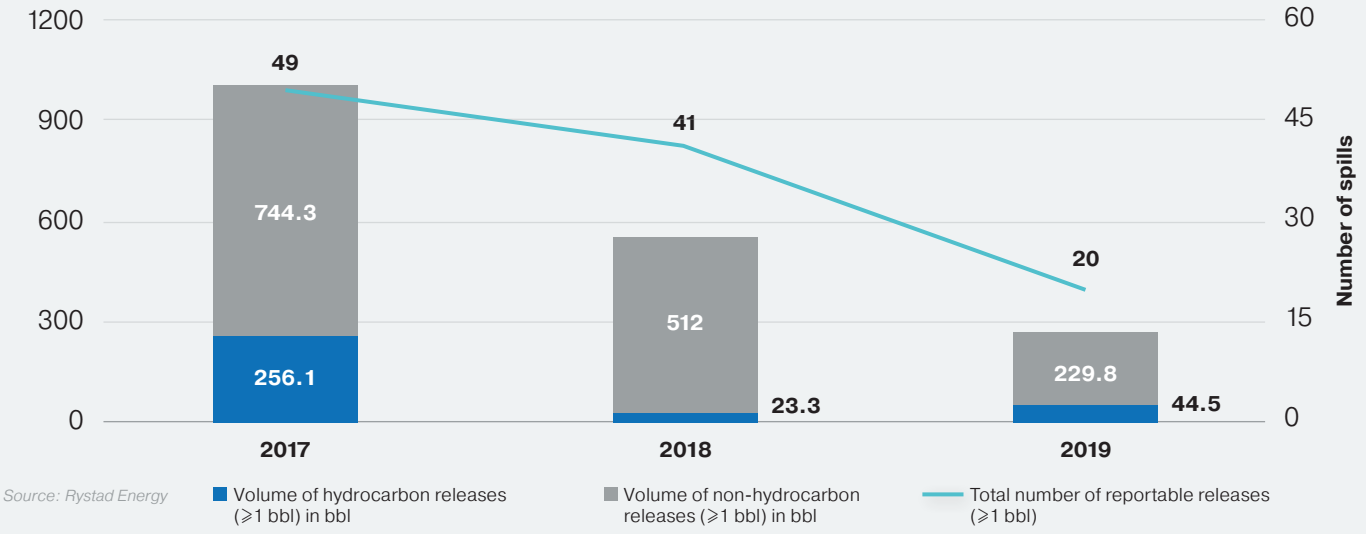
In recent years, we have demonstrated improved performance in spill management, with two consecutive years of reductions in the total volume and the total number of spills greater than or equal to 1 bbl in 2018 and 2019.

In 2019, the total volume of hydrocarbon and non-hydrocarbon releases greater than or equal to 1 bbl was 73 percent lower compared to 2017, while the total number of reportable releases greater than or equal to 1 bbl was 59 percent lower compared to 2017 levels.

Further to these improvements, we are committed to continuous improvement and incorporating learning and new approaches in our processes and procedures to enhance spill management.

Range Resources Volume and Number of Reportable Spills (≥ 1 bbl)

volume of reportable spills (⩾1 bbl) in bbl by type and total number of reportable spills



Implementing Process Changes

Range acts swiftly and purposefully to correct and implement process changes when incidents occur. For example, following a spill due to an unsecured hatch on a reuse water tank and subsequent breach of secondary containment system around a temporary storage battery, three main process changes resulted:

1. Thorough inspection (and physical marking) of all hatches prior to filling of any newly set storage tanks;
2. Initial filling of reuse tanks with freshwater beyond level of hatch prior to introduction of reuse water; and,
3. Increased maintenance of accumulated stormwater from within secondary containment systems.

Waste Management

At Range, we view responsible waste management as a key sustainable practice to protect the environment and the health of our communities. Further, we believe that waste management presents a significant opportunity to reduce cost and gain efficiencies in our operations. Through each part of our operating processes and across all our operating facilities, we manage, dispose, and characterize wastes in compliance with strenuous regulatory requirements.

Our management teams continually research methods to improve our reuse and reduction of wastes, specifically regarding drill cuttings and synthetic liner materials. Range's Environmental Compliance Department monitors waste management and reports our progress in waste reduction and waste reuse.

Additionally, we have developed processes and procedures for the reuse of drilling fluids. Any drilling fluids that are deemed to still be viable to develop future wells are reused. Range has permitted its own storage facilities that enable fluids to be safely stored until they can be reused at a future location. Without these permitted facilities, these fluids would require disposal.

Finally, as part of our waste management program, we have developed internal policies that cover monthly and annual reporting and auditing of landfills and treatment facilities and the evaluation of waste transporters. All facilities are audited prior to use, and all audits are documented.

Water Management

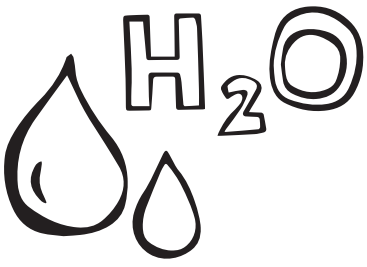
Water is essential to shale development and serves as a critical investment into a well that will produce energy for decades. Our goal is simple for water use: use only what we need and recycle and reuse to the fullest possible extent.

Over the years, various technologies and solutions have been developed and utilized as part of the company's water management plans, enabling us to reduce our water consumption needs and, in turn, the impact on the environment.

In 2009, Range pioneered technology that allows for the recycling and reuse of nearly 100 percent of the water across our Pennsylvania operations. More recently, we began recycling other operators' water in Pennsylvania, helping to reduce overall fresh water needs and improve well costs.

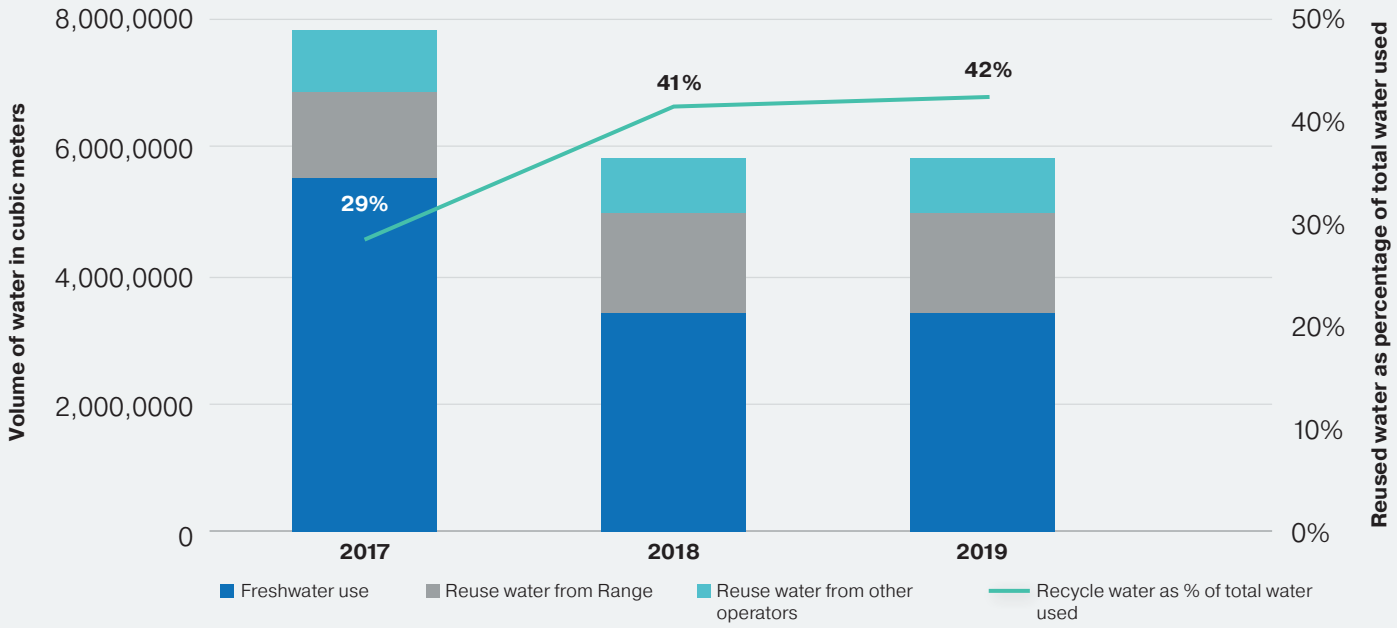
As an industry leader in developing large-scale water recycling technologies and capabilities, Range implements a comprehensive water management plan that is strategically guided by best practices and applicable laws and regulations.

Fresh water for our operations is sourced from multiple abundant, drought-tolerant sources that include public water utility companies, as well as the Ohio River and Susquehanna Rivers in Pennsylvania in compliance with state and regulatory commissions. None of our projects or operations are in water-scarce areas.



Range Resources Fresh Water and Recycled Water Use, 2017-2019

total fresh water use and recycled water used form Range and other operators in m³



Water Recycling Program

Our water recycling program is among the most advanced in the industry. We not only reuse nearly 100 percent of our flowback, produced, and containment water, but we also recycle water from other operators in our region, significantly reducing freshwater usage. Reused 795,553 bbl of flowback and produced water from third-party operators, with total reused water amounting to **147%** of Range-generated flowback and produced water in Pennsylvania.

In 2019, 42 percent of the total water we used for our operations was recycled flowback and produced water from Range and other operators. In Pennsylvania, we recycled 99.18 percent of the 10,429,356 bbl of flowback and produced water from our operations and an additional 5,003,762 bbl of water from other operators in the area.

Water Discharges

Range does not discharge any produced waters, flowback, drilling fluids or liquids of any kind.

- Our industry-leading reuse program allows us to recycle more than 99 percent of our produced waters in Pennsylvania as well as water from other area operators. The remaining small portion that is not reused typically consists of drilling fluid residuals, tank bottoms, and other non-reusable substances; this material is solidified and sent to landfills.
- In Louisiana, all produced and flowback water is sent to approved underground injection control (UIC) wells designed to safely dispose of brine water in accordance with state and federal regulations.

Hydraulic Fracturing

Despite the efforts of some to characterize it otherwise, hydraulic fracturing ("fracking") is a safe, proven technology used by the natural gas and oil industry for over 70 years and in more than a million wells across the United States. The process consists of pumping sand and water, along with a small percentage of additives, at a high pressure to create paper thin fractures in hydrocarbon-bearing rock formations to stimulate oil and natural gas production from rock that otherwise will not produce hydrocarbons. The network of small fractures held open by sand as a proppant creates a pathway for the natural gas to flow from the shale formation to the well.

Well Integrity

At Range, wells are designed, constructed and operated with safety and sustainability in mind, utilizing the most innovative and advanced technology and practices in the industry and meeting all regulatory specifications and requirements.

To ensure well integrity, multiple layers of protective steel casing is inserted deep below the surface and cemented back to the surface. The casing, cement specifications and process are governed by strict state regulations, as well as various additional industry standards.

The steel casings are designed and manufactured to provide long term protection against corrosive elements that may exist in the rock strata encountered during the drilling process. When necessary, additives or special cement blends may be used to help inhibit naturally occurring external forces such as H2S or CO2 from causing corrosion on steel casings.

Once the cement has set, the wellbore is drilled from the bottom of the previously cemented steel casing to the next depth. This process is repeated using smaller diameter steel casings until the well has reached its horizontal target.

For example, in a well stretching almost two miles, more than three million pounds of steel and cement are utilized to isolate the wellbore with several layers of casing cemented in place, ensuring the protection of surrounding groundwater aquifers and the safe production of oil and gas.

Water Protection

Water is a resource shared by all and we are deeply committed to the protection of all sources. From baseline pre-drill testing of water supplies to frequent wellbore integrity assessments, our best practice approach ensures that water is protected throughout the lifecycle of development. Range ensures the casing and cementing design for each well meets or exceeds industry standards and regulations.

Before operations even take place, Range voluntary tests water sources within a minimum (though often beyond) 2,500-foot radius of a well site prior to drilling in Pennsylvania. These tests are conducted by an approved, third-party company, and the results are sent to the landowners, state regulatory agencies and kept on file with Range. This data ensures that all stakeholders have access to more information about their water resources and baseline water quality before drilling takes place.

Active monitoring and evaluation of well bore integrity also ensures that drilling and completion activity occurs in a safe, isolated environment that protects groundwater resources. In the Marcellus region, for example, Range utilizes several techniques in advance of hydraulic fracturing to test well bore integrity, ensuring the multiple layers of steel casing and cement system are fully secure, preventing any fluid or methane from escaping the wellbore.

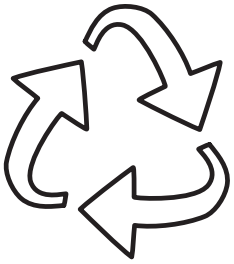
Chemicals Used and Disclosed

Range provides disclosure of every completed well's fracturing fluid through FracFocus, a national disclosure registry for oil and gas exploration founded by the Ground Water Protection Council and the Interstate Oil & Gas Compact Commission.

In addition, as part of our commitment to transparency, a core company value, Range was the first company to voluntarily disclose the composition of the fracturing fluid for each completed well on our website. For shale gas development, a typical fluid design is comprised of more than 99 percent water and sand, with a small proportion of common, highly diluted additives used to clean the wellbore and, prevent bacterial growth and scaling in the well.

Through the website FracFocus, we provide regulators, landowners and citizens an account of the highly diluted additives used at each well site, along with their classifications, volumes, dilution factors and common, everyday purposes. Range does not use diesel fuels as defined by the EPA, or BTEX in any of our hydraulic fracturing fluids.

Additionally, while fracturing additives are carefully managed and injected through multiple cemented strings of steel casing, Range encourages all vendors to utilize the most environmentally friendly additives whenever technically possible. We consistently work with scientists, government agencies and contractors to continuously improve our processes, including the use of "green completions," food grade fluids and biodegradable additives.



Range Ranks High

In 2019, As You Sow ranked Range third among the top 30 largest publicly traded natural gas and oil companies in North America based on management of water and chemicals in the horizontal drilling and hydraulic fracturing processes, scoring 20 of a possible 25 points. Range's high ranking reflects the company's focus to align its operations with the core values of Performance, Integrity, Innovation, and Transparency, and is the result of continually deploying best management practices.

10. Employee Engagement

Workforce Engagement

Our employees are at the heart of everything we do at Range.[4] As part of our focused commitment to creating the safest and most supportive workplace environment for our employees to thrive in, we look for every opportunity to live out our core values, including upholding the highest levels of transparency and integrity, in the work we do every day.

Our success is directly tied to the contributions of our employees and we rely on their ingenuity, dedication and feedback to ensure we are creating every opportunity to be a best place to work.

Attracting Top Talent

Our success relies on our ability to attract and retain top talent, which is why we place such a big focus on cultivating a workplace where our people can thrive. We're proud to be recognized as a top workplace, having been named a finalist for the Observer-Reporter's Best Place to Work in 2019.

To support the greatest level of transparency, we believe in an open-door approach, offering multiple avenues of communication and engagement between employees, managers, senior leadership and our Human Resources Department.

This approach has resulted in several innovative programs, initiatives and resources that have been created to support our employees' professional development and generate opportunities for growth:

- Leadership Excellence and Development (LEAD) program
- Ladies in Leadership Luncheons
- Manager Chat sessions
- Employee Focus Groups
- Internal and External Trainings
- Range Energy Network of Women (RENEW) Resource Group

The following sections outline the various initiatives and programs we have implemented and continue to execute to meet the needs and expectations of our valued employees.

[4] As of as of Aug. 15, 2020, we have 537 full-time employees.

Employee Benefits

Range's compensation philosophy is founded in industry-driven data and market competitiveness to ensure all employees are being paid equitably, based on their role in the company. Individual pay decisions throughout the year undergo a robust review and approval process.

During the annual compensation award cycle, managers are empowered to make pay decisions based on market data, performance, contribution and experience, among other factors. Corporate-level outlier and trend analysis is performed to ensure fairness enterprise-wide.

In addition, Range offers a number of employee benefits, including some created as a direct result of employee feedback and surveys.

- **Grandparent's Leave:** Range's grandparents receive paid time off up to three days per year, per event (separate from vacation) to a maximum of two events in a rolling 12-month period. Must be used within 60 days of birth.
- **Adoption Assistance:** Range will provide adoption assistance reimbursement on expenses incurred, up to a max of $10,000 per adoption and a $20,000 lifetime maximum.to employees with 12 months tenure.
- **Paid FMLA:** Range offers two weeks of paid FMLA leave for employees per year to care for a spouse, child, or parent, maternity/paternity leave, and adoption/foster care.[5]
- **Paid Volunteer Days:** Full-Time Employees receive two paid days per year to pursue volunteer opportunities in the communities where we live and operate.
- **Spot Bonus:** Our employees, other than officers, are eligible for spot bonus awards recognizing exemplary performance and contributions.
- **Year-Round Flex Schedule:** Employees have the option to work a year-round 9/80 or 4/36 work schedule.
- **Cariloop:** Range paid caregiver support benefit that gives employees a resource to assist with elder and childcare.
- **Tuition Assistance:** Range will reimburse employees up to $5,250 per calendar year for tuition and book costs.
- **Paid Vacation:** All employees receive a minimum of three weeks' vacation based on experience.

[5] To be eligible for FMLA leave, an employee must have worked for Range for at least 1 year and for at least 1,250 hours during the previous 12 months.

Diversity and Inclusion

We deeply value the importance of cultivating a workforce comprised of diverse backgrounds and experiences, which is key to our success, and we embrace the unique contributions made by our employees from all walks of life and without regard to gender, race, ethnicity or sexual orientation.

To help foster a culture of inclusiveness, all employees are required to participate in diversity and inclusion training on an annual basis. Additionally, managers undergo annual inclusion training based on a separate curriculum. We also conduct instructor-led training for all employees on a bi-annual basis.

In accordance with our anti-harassment policies, we are committed to treating all employees and consultants with honesty, fairness and respect, and providing a safe and healthy work environment. Abusive, harassing or offensive conduct is unacceptable, whether verbal or physical.

As outlined in our policy, Range is an equal opportunity employer that maintains a policy of nondiscrimination with respect to all employees and applicants for employment. Employment decisions will be made without regard to race, color, sex (including pregnancy), religion, national origin, age, disability, military service, genetic information or any other status protected by applicable law.

Employment decisions, subject to the business requirements of the Company, are based on the individual's qualifications, merit, and performance. In addition to compliance with federal equal employment laws, the Company complies with applicable state and local laws governing nondiscrimination.

Recently, Range started a new initiative focused on promoting inclusiveness called "Making Connections at Work" where Department Heads nominate employees to be highlighted on the company's intranet with a feature article showcasing their unique interests.

The goal is to both highlight the diverse backgrounds and experiences of our employees, and also to further connect people across the company. In order to attract and retain more women at Range, for instance, we have focused on creating resources and opportunities that directly support women in the workplace.

> "I decided to go to college because I wanted to be on the same level as most of my male co-worker's and I wanted Range management to know how serious I was to be a strong team member. I started as a part-time student but because of the uplifting spirit that the Ladies in Leadership Event showed me, I enrolled two semesters as a full-time student, graduated Summa Cum Laude and was able to sit next to my daughter during the graduation ceremony. One of the proudest moments in my life. I could not have gone through this period in my life without the encouragement of my peers and the women who have held the door for me."

Laura Schimmel
Landman at
Range Resources

In May 2019, we hosted our first

Ladies & Leadership Discussion

a special initiative borne out of the driven and creative minds within our Women's Resource Group. The panel discussion featured a female board member and a female company executive, during which employees asked questions related to professional development, career advancement, resource and best practice recommendations.

Training Programs

Training and development initiatives are core to ensuring we are cultivating the most safety-minded and skilled workforce. The courses and programs we offer our employees span all levels, from new hire orientations to manager and leadership programs.

In 2019, we offered approximately 30 classes carrying a wide range of topics from situational leadership, presentation skills, and conflict management, while several of our externally taught courses are industry-focused, such as gas marketing and petroleum economics.

We take great pride in our leadership curriculum, which ensures our management team is employing best practices in the workplace. This program prepares high performers who aspire to become senior leaders within our organization and spans the full life cycle of a leader's career at Range. Examples of the different types of trainings we provide to our employees include:

- **Leadership Readiness Assessment:** Identifies and evaluates high potential front-line employees with an interest in future leadership roles to determine developmental opportunities.
- **Internal and External Trainings:** A wide variety of courses on topics such as professional development, leadership, legal and compliance, impromptu speaking, managing conflict and more.
- **Leadership Excellence and Development (LEAD) program:** Nominated by Senior Leadership, 8-10 current leaders participate in a 12-month executive coaching program to develop and prepare to take on high-level roles at Range.

Leadership Readiness Assessment

In utilizing our Leadership Readiness Assessment, we assisted a high-potential employee, who was not quite ready for advancement, put together a development plan, which included training programs both in-house and external, and coached the employee through any hurdles in the process. The employee is currently a manager within the company, utilizing the tools and technique learned through the development plan.

Feedback from our employees has been resoundingly positive:

> "Overall, this training was very engaging, and the training materials provided will serve as a great resource to use throughout my career."

> "I appreciated the class. I hope that Range will continue to allow these types of classes to be taught. I think it is important for employees to know the differences of social styles and how to react to them or approach them when speaking with others. This creates a better work environment for all."

> "I enjoyed the entire class. The material is well put together. The facilitator does an excellent job delivering the message."

Range also provides customized resources for technical training, professional certifications and continuing education. This includes educational reimbursements for employees that choose to pursue further college education.

Over the years, we have learned that our different locations have differing needs when it comes to training. For example, at our Fort Worth/corporate office, we will continue to offer traditional instructor led and computer based- training classes.

We also offer whole departmental courses for those who are unable to participate in the company-wide classes due to time constraints or work commitments. This flexibility and customization enable managers to offer training to their employees in a format and a time that works for them. Additionally, we have converted our current in-house offerings into smaller online modules over multiple days to further enhance flexibility and accessibility.

Workforce Non-retaliation and Grievance

Range has contracted the services of an internet-based reporting system called Ethicspoint, which utilizes both web-based and phone features, as a means for anonymous reporting by its employees, external stakeholders and members of the public.

Any reports involving financial fraud or conduct by senior management are provided directly to the members of the Audit Committee of the Board. In addition to the reporting of financial issues, which are handled by the Audit Committee of the Board, Range has chosen to use this system to further enhance our reporting of human resources issues, such as harassment or violations of other policies.

Ethicspoint manages the reporting system, and they are contractually bound to ensure the system is completely confidential unless reporters choose to make their identity known.

Reports are first reviewed by our Vice President of Human Resources to determine the appropriate steps to handle each inquiry. The Ethicspoint system is designed to exclude from the process anyone who may be involved directly with the issue reported so that a full and independent investigation can be conducted.

To file a report, employees and other stakeholders may access the Ethicspoint website at www.ethicspoint.com and click on "File a Report" or call Ethicspoint's toll-free hotline at 1-866-384-4277.

11. Community Impact

Our commitment to supporting thriving communities is driven by our employees and begins within the walls of our company, starting with the well-being of our employees and extending to the communities where we live and work.

These efforts are guided by our ***"Invest, Inform and Educate"*** platform, which creates a strategic framework that ensures we are delivering the greatest impact to the communities we serve. This includes our efforts to continuously evaluate our giving priorities to identify opportunities to improve and enhance our contributions.

In line with our community engagement strategy, Range has established civic engagement programs that are designed to have long-term positive impacts on organizations within our core operating footprint.

The Range Corporate Partnership platform takes a long-term perspective and aims to build relationships with those who seek to enhance the standard of living in our community.

We invest through our charitable giving model that is thoughtfully administered through designated target categories including conservation, education and youth activities. We also leverage our employee volunteer program, employee grant matching program, and our Good Neighbor program, to maximize resources and opportunity to provide the most benefit in our community.

Over the past 10 years, we've proudly donated more than $10 million and our employees have volunteered more than 10,000 hours to support causes in our local communities.

We regularly review the effectiveness of our programs through qualitative and quantitative measures. We assess program effectiveness based on community and employee participation, and we conduct surveys among participants to learn on how we can improve.

From a qualitative review, and to ensure we maintain a sound process concerning the organizations we support, charitable giving requests that exceed $1,500 require a review and approval by a panel of employees from across the company who assess the merits of each project based on potential impact and the extent to which the project is relevant for Range.

In 2019, our total charitable contributions amounted to $442,093 towards more than 350 non-profit and civic organizations across our core operating footprint. Our employees volunteered more than 700 hours at company-sponsored events, including some of the examples listed below.

- **Good Neighbor Program:** 2019 marked the second year for our annual Good Neighbor Fund which is administered to first responders through the Washington County Community Foundation.
- **2000 Turkeys Food Drive:** This year marked Range's 6th year hosting the 2000 Turkeys Food Drive benefitting the Washington County Food Bank. For more than a decade, Range has been contributing to the Washington County Food Bank. In 2015, we established this initiative as a creative way to bolster our contributions and get employees more involved. Each year, we pledge to match the general public's contributions, with our employees collecting donations on the street in Downtown Washington every Friday before Thanksgiving.
- **United Way of Washington County:** Since 2007, Range has partnered with the United Way to give back to a number of its nonprofit partners. Through our workplace giving campaign,

Social Investments

Our philanthropic and charitable giving efforts focus around the following core areas of need in the communities where we operate:

- Education and Youth Activities
- Community Services & Enrichment
- Health and Wellness
- First Responders
- Conservation

our employees can sign up to contribute through payroll deductions. In addition, Range hosts an annual charity golf outing and clay shoot, giving a portion of the proceeds to United Way. For more than a decade, Range has been recognized by United Way as one of the top 5 contributing companies to the organization.

- **City Mission:** Range has been a long-time supporter of City Mission, an organization which provides everything from shelter to career services to the homeless. In 2018, we held our first annual charity softball game. Approximately 20 Range employees played against a team of City Mission residents. The event was a huge success and created a welcomed diversion from the challenges City Mission residents face.
- **Washington County Fair:** Since 2008, Range has been involved in the local youth 4-H and Future Farmers of America programs. In addition to hosting a booth staffed with Range employee volunteers, many of our employees bid on and purchase animals during the youth livestock auction to donate back to the 4-H/FFA Scholarship Fund. Our continued involvement also created what is known as the "Range Pool," which provides an opportunity for anyone who wishes to donate their animal back for resale to increase the value of the scholarship fund. The partnership demonstrates Range's deep appreciation for local landowners, farmers, and youth agriculture.
- **Dress for Success:** Every year, Range hosts a workshop for women facing challenges entering the workforce, which our employees put a great effort into planning and hosting. Many of these ideas are then used for our Junior Athena program, a partnership with the Washington County Chamber of Commerce which consists of similar workshops for young ladies in high school.
- **Variety – The Children's Charity of Pittsburgh:** In December, Range hosted a bike presentation for Variety – The Children's Charity of Pittsburgh, an organization that enables children with disabilities to live life to the fullest with a focus on mobility, communication and social inclusion. Range has been working with Variety since 2017 to help ensure that every child in need can receive life-changing adaptive equipment. This year, as a surprise to the Variety team, Range presented a $5,000 check to help them continue supporting and empowering disabled children.
- **Cystic Fibrosis Foundation:** Since 2010, Range has supported and partnered with the Cystic Fibrosis Foundation (CFF). Over the last decade, Range has invested nearly $180,000 toward CFF's mission to find a cure for cystic fibrosis, though the relationship has been strengthened through much more than monetary donations. In 2019, Range invested $10,000 in sponsorship funding between CFF's Fly Fishing Classic and Southpointe Corporate Cup, a fundraising and Olympic-style athletic competition for businesses in the Southpointe business park. In addition to sponsorship dollars, Range employees competing in the corporate cup raise additional money, which, in 2019, totaled an additional $5,685, earning Range a 2nd place ranking out of 18 teams.
- **Magee Women's Research Institute and Foundation:** Range has supported Magee Women's Research Institute and Foundation since 2012, investing more than $100,000 toward Magee's world-leading research in women's health and biology. In 2019, Range invested $10,000 as a sponsor for Magee's annual Women's Cancer Research Center Fly Fishing Classic. In addition, Range employees volunteered at the annual Savor Pittsburgh fundraiser to benefit the Foundation.

> "Through Range's relationship with Variety we have been able to experience firsthand the smiles and joy when a child receives his or her bike or other specialized equipment for the first time."

Erin McDowell
Range's Vice President – Deputy General Counsel who serves as a Variety board member.

Planting Roots in our Communities

For the second year in a row, a group of Range employees spent the day working together to plant trees at Independence Township Community Park.

The day resulted in the planting and securing of 16 trees of different varieties including two Sycamores, two Autumn Blaze Maples, two Crimson King Maples, two Flowering Cherries, three Canada Red Cherries and five Sunset Maples. Each variety had a specific purpose in the park, with some examples being the large Sycamores intended to help stabilize the canoe launch area, or the Flowering Cherries which help absorb excess water in low-lying areas. The annual tree planting will continue to be a part of Range's conservation efforts for many years to come.

While these important giving efforts are a central engagement focus, we also seek to work with communities through our extensive school outreach programs aimed at engaging young people about the benefits the natural gas industry presents for them.

Our Educate model includes our newly revamped scholarship program (which emphasizes collaboration and interaction between our employees and the students), job shadows, career presentations and advisory board commitments.

A special part of our educational outreach in 2019 saw us host our first "Problem Solution Forum" where we welcomed 150 students to our building and presented them with real-world situations our company faces daily.

We also support our local communities through the participation of our leadership team on local boards and advisory committees including the Greater Washington County Food Bank, TRPIL, Southwest Corner Workforce Advisory Board, Washington County Chamber of Commerce Board, and Dress for Success, among others.

Community Engagement

In addition to our philanthropic activities, we execute community-focused initiatives to ensure we are serving as a reliable, go-to resource for the communities that live near our operations. This is a primary focus of the inform pillar of our community engagement platform.

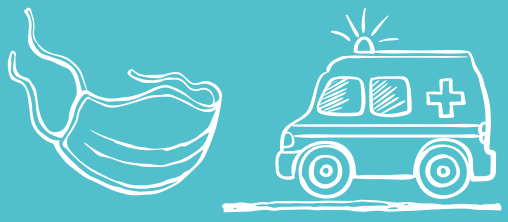
We facilitate several programs throughout the year to maintain two-way communications with the residents in the communities where we operate. These programs include efforts to provide essential information and timely updates to residents, but also initiatives which enable us to be responsive to feedback from community members.

We seek to inform and foster feedback from community members through coffee break discussions, Community Advisory Panel (CAP) meetings, field tours, meetings with non-profits, presentations to rotary groups, tech schools and local chambers, and other outreach efforts.

This year, we expanded our first CAP meeting to include 75 community leaders, in addition to our core 30 members, and we featured a Legislative & Regulatory update in partnership with the government affairs team. At the end of October, we conducted our first "Twilight Rig & Pad Tour." This meeting included our core 30 CAP members plus teachers, superintendents and school administrators.

- In May of 2019, South Strabane Township presented Range with an Outstanding Good Neighbor recognition, which demonstrated our commitment to best practices in that – one of our active operations communities.

Pandemic Response



Amid the uncertainty caused by the COVID-19 pandemic, Range stepped up in a big way to support first responders in Washington County by donating much needed personal protective equipment. including N95 masks, safety glasses, and nitrile gloves to the Washington Health System. In addition, we launched the Range Resources Community Stimulus Package, a financial assistance program that will provide more than $100,000 to non-profits across our footprint in Pennsylvania, Louisiana and Texas.

Junior Athena Workshop

In May, we hosted 80 female students to our second Annual Junior Athena Workshop. This workshop covers topics such as confidence, personal presence, networking skills, job interview skills and includes women from the business community so that students make begin making connections in high school.

Innovation Award

This year, Range was awarded the Junior Achievement Corporate Innovation Award in recognition of Range's newly launched educational augmented reality app for students.

Community Education

Whenever we enter a community to facilitate the drilling of a well site we take a multi-pronged approach to educate the public about the project and our role in the community. This includes open houses, in-person meetings at our operations and in the community; door-to-door visits from our land agents; production pad tours and more. Our employee commitment to this effort is always tremendous and we are proud of the work we do to develop trust within our communities.

Summary of Range Resources Activities and U.S. Economic Impact for 2019

Range Resources Economic Activities	Results	Range Resources Economic Activities	Results
Employees	742	**Ancillary jobs supported**	13,500
Employee compensation	$148 million	**GDP contribution**	$1.71 billion
Capital expenditures	$671 million	**Ancillary labor income**	$851 million
Payments Includes royalties, lease bonus payments, right-of-way payments, delayed rents, and property acquisitions	$426 million	**Average annual compensation of ancillary jobs supported**	$63,200
Dividends, stock repurchases, and distributions	$27 million[4]	**State and local tax revenues supported**	$222 million

State and Local Tax Revenues Supported by Range Resources in 2019 (millions)

Category	Pennsylvania	Texas	Louisiana	Rest of U.S.	United States
Property Taxes	$17.3	$3.2	$5.1	$35.9	$61.6
Sales Taxes	$20.0	$3.6	$6.2	$37.2	$67.0
Income Taxes	$17.6	$1.9	$1.1	$13.5	$34.1
Other Personal Taxes	$1.4	$0.7	$0.1	$3.4	$5.6
Taxes on Production and Imports	$29.1	$0.5	$8.5	$6.5	$44.5
Other Taxes	$3.5	$0.3	$0.6	$4.6	$9.1
Total Revenues	$88.9	$10.1	$21.7	$101.1	$221.8

Economic Impacts

In 2019, Range made significant contributions to the U.S. and local economies. In 2019 alone, we created or supported 14,200 jobs, contributed $1.71 billion in GDP, and provided $222 million in state and local tax revenues. Most of these contributions were to Pennsylvania, Texas, and Louisiana, home to Range's employees.

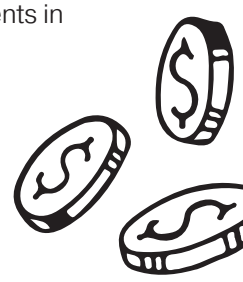
The table above summarizes Range's activities and contributions to the U.S. economy in 2019.

State and Local Tax Revenues

On the state and local level, Range's economic activities contributed $222 million in state and local tax revenues in 2019. These tax revenues help bolster state and local government budgets in areas like education and transportation improvements.

More specifically, Range supported $88.9 million of state and local tax revenues in Pennsylvania and $21.7 million in Louisiana. The table above shows tax revenues supported by capital expenditures, operational expenditures, and payments (including royalties, lease bonus payments, right-of-way payments, delayed rents, and property acquisitions).

For broader context, Range has paid $206 million in impact fees since 2011, with $26.5 million paid in 2019, and we've paid more than $2 billion in royalty and lease payments in Pennsylvania since 2006.

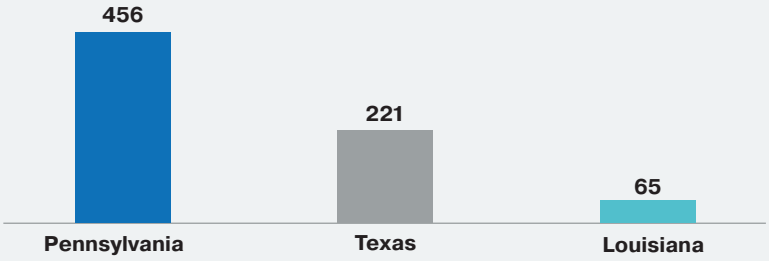


Employment

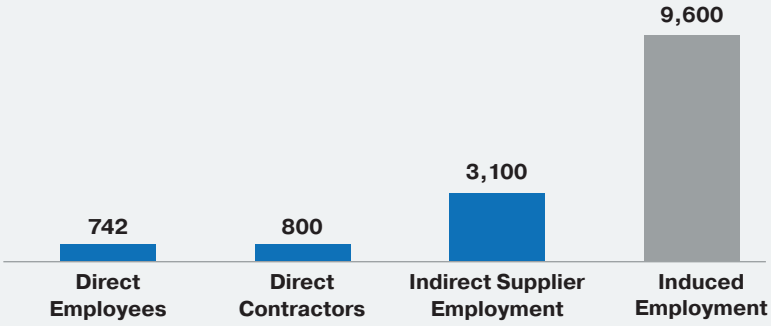
In 2019, Range directly employed 742 workers across Pennsylvania, Texas and Louisiana; however, Range's employment contribution extends well beyond our own employees.

Range also employs contractors to supply the goods and services for capital investments and operations, suppliers to provide materials and equipment, and contributes to induced effects on consumer expenditures. The figure to the right demonstrates Range's total employment contribution including direct employees, direct contractors, indirect suppliers, and the induced employment.

Range Resources' Direct Employment by State



U.S. Employment Contribution of Range Resources in 2019



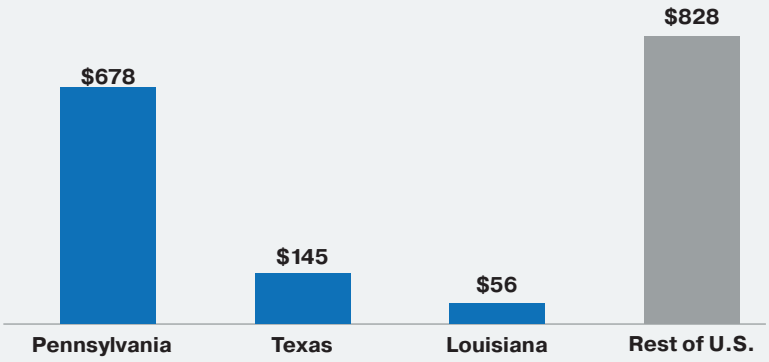
Range GDP Contributions

Range contributed $1.71 billion in value-added contributions to the U.S. GDP in 2019.

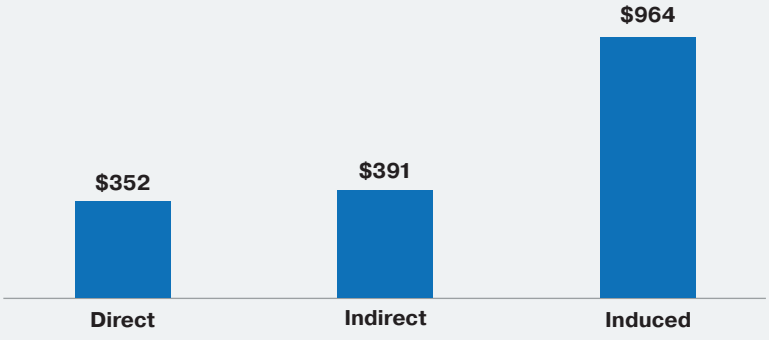
Our total induced impact — the impact of spending by our employees, direct contractors, suppliers, etc. — was nearly $1 billion.

Our direct and indirect activities were both important contributors too, each producing more than $350 million.

GDP Contributions by State (millions)



Range Economic Impact (millions)



12. Additional Factors

Several topic areas recommended under the various frameworks may not directly apply to our company. Below is a brief discussion of some additional factors that we took into consideration but did not find them to have a significant impact on our business and operations.

- **Product stewardship.** This guidance primarily applies to petroleum products. Our communications to our customers and communities concerning the risks related to use, handling, and transport of our products are in compliance with state and federal rules and regulations.
- **Security risk management.** We do not believe that we are materially affected by security threats dealing with social or political unrest, terrorism or armed conflict, sabotage, theft, hijackings, or other company or individual attacks. As discussed in the Health and Safety section of this report, we promote and maintain a strong safety culture throughout our operations and daily activities.
- **Transparency of payments to host governments.** We do not operate outside the United States. Our Code of Business and Ethics, as discussed in the relevant sections of this report, covers a robust set of policies around relationships with government officials, including conflicts of interests, gifts, political contributions, and record retention, in accordance with our ethical guidelines that go beyond mere compliance with state and federal laws and regulations.
- **Indigenous peoples and land acquisition and involuntary resettlement.** Our operations do not impact any areas of indigenous peoples, First Peoples, or First Nations. Our activities do not involve any involuntary settlement of people or of their economic activities.
- **Human rights management.** Our operations are fully based in the United States, and as a business, we are committed to human rights, and we fully comply with labor laws and regulations, including laws related to human trafficking and child labor.

13. Performance Indicators

Environmental

Emissions

	2019*	2018	2017
Total Direct GHG Emissions (metric tons CO_2e)	366,280	473,164	543,091
GHG Emissions Intensity (metric tons CO_2e/Mmcfe)	0.44	0.59	0.74
Greenhouse Gas Emissions by Gas Type			
CO_2 Emissions (metric tons)	213,890	252,722	269,214
CH_4 Emissions (metric tons CO_2e)	152,063	220,042	273,421
N_2O Emissions (metric tons CO_2e)	327	400	456
CH_4 Emissions (metric tons)	6,083	8,802	10,937
CH_4 Emissions intensity (as % from total gas production from wells)	0.0398%	0.0636%	0.0860%
Greenhouse Gas Emissions by Source (metric tons CO_2e)			
Energy/Combustion Emissions	181,892	215,176	251,127
Other Vented Emissions	76,055	148,869	182,047
Fugitive Emissions	47,843	55,651	75,796
Emissions from Flared Hydrocarbons	33,054	43,765	21,842
Process Emissions	27,436	9,703	12,279
Indirect Emissions (Scope 2) (metric tons CO2e)	2,276	1,717	2,137
Flared Hydrocarbon Gas			
Volume of Hydrocarbons Flared (Mmcfe)	336.46	515.08	246.19
Other Air Pollutants			
NO_x Emissions (metric tons)	3,327	3,733	4,177
VOC Emissions (metric tons)	3,182	3,176	3,314
PM_{10} Emissions (metric tons)	65.6	68.9	73.0
SO_x Emissions (metric tons)	10.0	9.6	9.7

* Revised 2019 data. This data was submitted to the U.S. Environmental Protection Agency in accordance with their guidelines. An error occurred in the calculation process. The calculation and reporting has been corrected and the 2020 update will show a continued trend in emission reductions, as has been shown in Range's recent investor relations materials.

Historical Production Emissions and Production Emissions Intensity*

	2019	2018	2017	2016	2015	2014	2013	2012	2011
Net Production (Mmcfe)	833,354	803,408	733,231	564,420	509,328	424,267	343,022	275,465	189,077
Production-only Emissions (MT CO_2e) (excluding boosting and gathering)	329,799	429,355	494,559	371,170	293,200	174,365	221,496	234,115	278,699
Production GHG Intensity (MT CO_2e/Mmcfe)	0.40	0.53	0.67	0.66	0.58	0.41	0.65	0.85	1.47
Total GHG Emissions (including boosting and gathering)*	**366,280**	**473,164**	**543,094**	**424,085**					

* The calculation of GHG emissions including boosting and gathering is not available for years prior to 2016.

Water

All figures expressed in cubic meters (m^3).	2019	2018	2017
Freshwater Withdrawn			
Pennsylvania	3,068,615	2,917,652	3,681,934
Louisiana	338,709	528,938	1,910,487
Total Freshwater Withdrawn	**3,407,324**	**3,446,590**	**5,592,422**
Freshwater Withdrawn by Source			
Pennsylvania – Surface Water	1,743,463	1,512,942	2,459,569
Pennsylvania – Municipal Water	1,325,152	1,404,710	1,178,812
Pennsylvania – Rainwater	—-	—-	43,582
Louisiana – Surface Water	338,709	528,938	1,910,487
Reused Water (including form other Operators) in m^3			
Pennsylvania	2,440,094	2,428,831	2,216,874
Louisiana	0	0	0
Total Water Used in m^3	***5,847,418***	***5,875,421***	***7,809,295***
Pennsylvania Water Recycling Program			
PA Flowback and Produced Water Generated	1,658,132	1,588,671	1,360,740
Range-Generated PA Flowback Water Reused	1,644,561	1,581,686	1,350,504
Percentage of Range-Generated PA Flowback Reused	99.2%	99.6%	99.2%
Total Reused Water (including other operators)	2,440,094	2,428,831	2,216,874
Total Reused Water as Percentage of Total Water Used	41.7%	41.3%	28.4%

* Revised 2019 data. This data was submitted to the U.S. Environmental Protection Agency in accordance with their guidelines. An error occurred in the calculation process. The calculation and reporting has been corrected and the 2020 update will show a continued trend in emission reductions, as has been shown in Range's recent investor relations materials.

Spills

	2019	2018	2017
Number of Hydrocarbon Releases ⩾ 1 bbl	7	5	17
Volume of Hydrocarbon Releases ⩾ 1 bbl (in bbl)	44.5	23.3	256.1
Number of Non-Hydrocarbon Releases ⩾ 1 bbl	13	36	32
Volume of Non-Hydrocarbon Releases ⩾ 1 bbl (in bbl)	229.8	512	744.3
Number of Total Spills Resulting in Release ⩾ 1 bbl	20	41	49
Volume Total Spills Resulting in Release ⩾ 1 bbl (in bbl)	274.3	535.3	1000.4

Waste

	2019	2018	2017
Hazardous waste (tons)	N/A	N/A	N/A
Non-Hazardous Waste			
Reuse (m3)	2,440,094	2,428,831	2,216,874
Recycled	0	0	0
Recovered	0	0	0
Composting	0	0	0
Incineration	0	0	0
Deep well Injection (in Louisiana only)	307,000	N/A	N/A
Landfill (tons)	210,000	229,500	277,000
On-site storage	0	0	0

Health and Safety

	2019	2018	2017	2016	2015	2014
Range Employees Total Recordable Injury Rate (number of incidents * 200,000) / hours worked)	0.62	0.58	0.12	0.81	0.51	0.51
Range Employees Days Away, Restricted, or Transferred (number of employee incidents resulting in days away, restricted or transferred * 200,000 / total employee hours worked)	0.00	0.23	0.00	0.75	0.10	0.00
Employee Fatalities	0	0	0	0	0	0
Number of Contractor Reportable Incidents	25	35	46	24	36	30
Contractor Fatalities	0	0	0	0	0	0
Recordable Preventable Vehicle Incident Rate (Preventable Vehicle incidents Per 1 Million Miles)	3.34	3.39	4.30	3.94	3.50	2.75

Economic

	2019	2018	2017
Revenues	$2.8 billion	$3.3 billion	$2.6 billion
Production			
Natural gas (Mmcf)	578,114	548,085	490,253
Natural gas liquids (Mbbls)	38,850	38,325	35,709
Crude oil and condensate (Mbbls)	3,690	4,228	4,787
Total (Mmcfe)[i]	**833,354**	**803,408**	**733,231**
Average Sales Prices (excluding derivative settlements)			
Natural gas (per mcf)	$2.40	$3.04	2.75
Natural gas liquids (per bbl)	$17.53	$24.30	$16.93
Crude oil and condensate (per bbl)	$50.26	$60.52	$46.30
Total (per mcfe)[i]	**$2.71**	**$3.55**	**$2.97**
Proved Reserves			
Natural Gas (Mmcf) (Total)	12,114,977	12,027,702	10,263,649
Developed	6,486,211	6,451,012	5,437,674
Undeveloped	5,628,766	5,576,690	4,825,975
NGLs (Mbbls) (Total)	938,236	921,594	763,264
Developed	535,007	512,318	448,258
Undeveloped	403,229	403,229	315,006
Oil (Mbbls) (Total)	74,532	85,856	69,854
Developed	34,369	38,658	36,808
Undeveloped	40,163	47,198	33,046
Proved Reserve Value (PV-10)[ii]	**$7.6 billion**		

[i] Oil and NGLs volumes are converted at the rate of one barrel equals six mcf based upon the approximate relative energy content of oil to natural gas, which is not indicative of the relationship between oil and natural gas prices.

[ii] PV-10 was prepared using the twelve-month average prices for 2019, discounted at 10% per annum. Year-end PV-10 is a non-GAAP financial measure as defined by the SEC.

14. Content Indices to Reporting Standards and Guidelines

The following tables provide content indices for several sustainability reporting frameworks and standards. When the title of a relevant document is not explicitly mentioned, it is implied that the relevant disclosure resides in the 2020 Corporate Sustainability Report, with the report section and relevant page numbers listed under Range's relevant disclosures.

SASB

Issue	Metric	Indicator	Relevant Range Resources Disclosures
Environmental Topics			
Greenhouse Gas Emissions	Gross Global Scope 1 emissions, percentage of methane, percentage covered under emissions-limiting regulations	EM-EP-110a.1	Greenhouse Gas Emissions, pp. 32-40 Performance Indicators, p. 63
	Amount of gross global Scope 1 emissions from: (1) flared hydrocarbons, (2) other combustion, (3) process emissions, (4) other vented emissions, and (5) fugitive emissions	EM-EP-110a.2	Greenhouse Gas Emissions, p. 32-40 Performance Indicators, p. 63
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	EM-EP-110a.3	Our Strategic Response to the Climate Policy Discussion, pp. 23-30 Greenhouse Gas Emissions, pp. 32-40
Air Quality	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) volatile organic compounds (VOCs), and (4) particulate matter (PM10)	EM-EP-120a.1	Air Quality & Other Emissions, pp. 42-43 Performance Indicators, p. 63
Water Management	(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	EM-EP-140a.1	Water Management, pp. 45-46 Performance Indicators, p. 64
	Volume of produced water and flowback generated; percentage (1) discharged, (2) injected, (3) recycled; hydrocarbon content in discharged water	EM-EP-140a.2	Water Management, pp. 45-46 Performance Indicators, p. 64
	Percentage of hydraulically fractured wells for which there is public disclosure of all fracturing fluid chemicals used	EM-EP-140a.3	Hydraulic Fracturing, pp. 47-49
	Percentage of hydraulic fracturing sites where ground or surface water quality deteriorated compared to a baseline	EM-EP-140a.4	Hydraulic Fracturing, pp. 47-49
Biodiversity Impacts	Description of environmental management policies and practices for active sites	EM-EP-110a.1	Biodiversity and Ecosystems, pp. 41-42
	Number and aggregate volume of hydrocarbon spills, volume in Arctic, volume impacting shorelines with ESI rankings 8-10, and volume recovered	EM-EP-110a.2	Spill Prevention, pp.43-45 Performance Indicators, p.65
Health, Safety, Social and Economic Topics			
Security, Human Rights & Rights of Indigenous Peoples	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	EM-EP-210a.3	Additional Factors, p. 62
Community Relations	Discussion of process to manage risks and opportunities associated with community rights and interests	EM-EP-210b.1	Community Impact, pp. 55-60
Workforce Health & Safety	(1) Total recordable incident rate (TRIR), (2) fatality rate, (3) near miss frequency rate (NMFR), and (4) average hours of health, safety, and emergency response training for (a) full-time employees, (b) contract employees, and (c) short-service employees	EM-EP-320a.1	Safety Leadership, pp. 18-21 Performance Indicators, p. 65
	Discussion of management systems used to integrate a culture of safety throughout the exploration and production lifecycle	EM-EP-320a.2	Safety Leadership, pp. 18-21

SASB (cont)

Issue	Metric	Indicator	Relevant Range Resources Disclosures
Health, Safety, Social and Economic Topics			
Reserves Valuation & Capital Expenditures	Sensitivity of hydrocarbon reserve levels to future price projection scenarios that account for a price on carbon emissions	EM-EP-420a.1	Scenario Analysis and Climate Change Risk Management, pp. 24-31
	Discussion of how price and demand for hydrocarbons and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets	EM-EP-420a.4	Scenario Analysis and Climate Change Risk Management, pp. 24-31
Business Ethics & Transparency	Description of the management system for prevention of corruption and bribery throughout the value chain	EM-EP-510a.2	Code of Business Conduct and Ethics and Political Engagement, p. 17
Management of the Legal & Regulatory Environment	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	EM-EP-530a.1	Political Engagement, p. 17 Climate Change, p. 22-40
Critical Incident Risk Management	Description of management systems used to identify and mitigate catastrophic and tail-end risks	EM-EP-540a.2	Safety Leadership, pp. 18-21 Spill Prevention, pp. 43-45

IPIECA

Modules	Issues	Indicators	Range Disclosure
Governance and business ethics	Governance and management systems	GOV-1: Governance approach	Our Core Values, p. 10 Our Approach to Sustainability, p. 11 Corporate Governance, 13-17
		GOV-2: Management systems	Multiple report sections
	Business ethics and transparency	GOV-3: Preventing corruption	Code of Business Conduct and Ethics and Political Engagement, p. 17
		GOV-4: Transparency of payments to host governments	Additional Factors, p. 62
		GOV-5: Public Advocacy and Lobbying	Political Engagement, p. 17
Climate change and energy	Climate strategy and risk	CCE-1: Climate governance and strategy	Climate Change, pp. 22-31
		CCE-2: Climate risk and opportunities	Climate Change, pp. 31-32
	Technology	CCE-3: Lower-carbon technology	Greenhouse Gas Emissions, pp. 32-40
	Emissions	CCE-4: Greenhouse gas (GHG) emissions	Greenhouse Gas Emissions, pp. 32-40 Performance Indicators, p. 63
		CCE-5: Methane emissions	Climate Change, pp. 22-40 Performance Indicators, p. 63
	Energy use	CCE-6: Energy Use	Greenhouse Gas Emissions, pp. 32-39
	Flaring	CCE-7: Flared Gas	Flared Gas, p. 40

IPIECA (cont)

Modules	Issues	Indicators	Range Disclosure
Environment	Water	ENV-1: Freshwater	Water Management and Hydraulic Fracturing, pp. 45-49
		ENV-2: Discharges to water	Water Management and Hydraulic Fracturing, pp. 45-49
	Biodiversity	ENV-3: Biodiversity policy and strategy	Biodiversity and Ecosystems, pp. 41-42
		ENV-4: Protected and priority areas for biodiversity conservation	Biodiversity and Ecosystems, pp. 41-42
	Air emissions	ENV-5: Emissions to air	Air Quality & Other Emissions, pp. 42-43
	Spills	ENV-6: Spills to the environment	Spill Prevention, pp. 43-45
	Materials management	ENV-7: Materials management	Waste Management, p. 45
Safety, health, and security	Workforce protection	SHS-1: Safety, health and security engagement	Safety Leadership, pp. 18-21
		SHS-2: Workforce health	Safety Leadership, pp. 18-21
		SHS-3: Occupational injury and illness incidents	Safety Leadership, pp. 18-21 Performance Indicators, p. 65
		SHS-4: Transport safety	Safety Leadership, pp. 18-21
	Product health, safety, and environmental risk	SHS-5: Product stewardship	Additional Factors, p. 62
	Security	SHS-7: Security Risk Management	Additional Factors, p. 62
Social	Human rights management	SOC-1: Human rights due diligence	Additional Factors, p. 62
		SOC-2: Suppliers and human rights	Additional Factors, p. 62
		SOC-3: Security risk management	Additional Factors, p. 62
	Labor practices	SOC-4: Site-based labor practices and worker accommodation	Employee Engagement, pp. 50-54
		SOC-5: Workforce diversity and inclusion	Employee Engagement, pp. 50-54
		SOC-6: Workforce engagement	Employee Engagement, pp. 50-54
		SOC-7: Workforce training and development	Employee Engagement, pp. 50-54
		SOC-8: Workforce non-retaliation and grievance mechanisms	Employee Engagement, pp. 50-54
	Community engagement	SOC-9: Local community impacts and engagement	Community Impact, pp. 55-58
		SOC-10: Indigenous peoples	Additional Factors, p. 62
		SOC-11: Land acquisition and involuntary resettlement	Additional Factors, p. 62
		SOC-12: Community grievance mechanisms	Community Impact, pp. 55-58
		SOC-13: Social Investment	Community Impact, pp. 55-58
	Local content	SOC-14: Local procurement and supplier development	Economic Impacts, pp. 59-60
		SOC-15: Local hiring practices	Economic Impacts, pp. 59-60

GRI Standards Index

Issue	Metric	Indicator	Relevant Range Resources Disclosures
General Topics			
General Disclosures	Name of the organization	GRI 102-1	Range Resources Corporation
	Activities, brands, products, and services	GRI 102-2	Exploration, development and acquisition of natural gas and oil properties.
	Location of headquarters	GRI 102-3	Fort Worth, Texas
	Location of operations	GRI 102-4	United States
	Ownership and legal form	GRI 102-5	Publicly listed company
	Markets served	GRI 102-6	United States
	Scale of the organization	GRI 102-7	2019 Annual Report, 10-K Form [a]
	Information on employees and other workers	GRI 102-8	2019 Annual Report, 10-K Form [a]
	Supply chain	GRI 102-9	2019 Annual Report, 10-K Form [a]
	Significant changes to the organization and its supply chain	GRI 102-10	2019 Annual Report, 10-K Form [a]
	Precautionary Principle or approach	GRI 102-11	2019 Annual Report, 10-K Form [a]
	External initiatives	GRI 102-12	2020 Sustainability Report, multiple sections
	Membership of associations	GRI 102-13	Political Engagement, p. 17 Company Website – Political Engagement [e]
	Statement from Senior Decision-Maker	GRI 102-14	Range disclosure: Letters from the Board and the CEO, pp. 4-7
	Key impacts, risks, and opportunities	GRI 102-15	2019 Annual Report [a] and 2020 Corporate Sustainability Report
	Values, principles, standards, and norms of behavior	GRI 102-16	Our Core Values, p. 10
	Mechanisms for advice and concerns about ethics	GRI 102-17	Company Website - Code of Conduct & Business Ethics [d]
	Governance structure	GRI 102-18	2019 Annual Report [a], 2020 Proxy Statement [b], Company Website and 2020 Corporate Sustainability Report
	Delegating authority	GRI 102-19	Corporate Governance [c], pp. 13-17
	Executive-level responsibility for economic, environmental, and social topics	GRI 102-20	Corporate Governance [c], pp. 13-17
	Consulting stakeholders on economic, environmental, and social topics	GRI 102-21	2020 Corporate Sustainability Report, multiple sections
	Composition of the highest governance body and its committees	GRI 102-22	Corporate Governance – Company Website [c]
	Chair of the highest governance body	GRI 102-23	Greg. G. Maxwell
	Nominating and selecting the highest governance body	GRI 102-24	Corporate Governance Section of Company Website [c]
	Conflicts of interest	GRI 102-25	Company Website - Code of Conduct & Business Ethics [d]
	Role of highest governance body in setting purpose, values, and strategy	GRI 102-26	2019 Annual Report [a], 2020 Proxy Statement [b], Company Website and 2020 Corporate Sustainability Report
	Collective knowledge of highest governance body	GRI 102-27	2020 Proxy Statement [b], Corporate Governance – Company Website [c] and 2020 Corporate Sustainability Report
	Evaluating the highest governance body's performance	GRI 102-28	Proxy Statement [b] and Corporate Governance [c] – Company Website

GRI Standards Index (cont)

Issue	Metric	Indicator	Relevant Range Resources Disclosures
General Topics			
General Disclosures	Effectiveness of risk management processes	GRI 102-30	2019 Annual Report [a], 2020 Proxy Statement [b], and 2020 Corporate Sustainability Report
	Review of economic, environmental, and social topics	GRI 102-31	Corporate Governance, pp. 13-17, Climate Change, pp. 22-23
	Highest governance body's role in sustainability reporting	GRI 102-32	Board of Directors, see Corporate Governance, pp. 13-17
	Communicating critical concerns	GRI 102-33	2019 Annual Report [a], 2020 Proxy Statement [b], and 2020 Corporate Sustainability Report
	Nature and total number of critical concerns	GRI 102-34	2019 Annual Report [a] and 2020 Proxy Statement [b]
	Remuneration policies	GRI 102-35	2020 Proxy Statement [b]
	Process for determining remuneration	GRI 102-36	2020 Proxy Statement [b]
	Stakeholders' involvement in remuneration	GRI 102-37	2020 Proxy Statement [b]
	Annual total compensation ratio	GRI 102-38	2020 Proxy Statement [b]
	Percentage increase in annual total compensation ratio	GRI 102-39	2020 Proxy Statement [b]
	List of stakeholder groups	GRI 102-40	2020 Corporate Sustainability Report, multiple sections
	Collective bargaining agreements	GRI 102-41	2019 Annual Report [a]
	Identifying and selecting stakeholders	GRI 102-42	2020 Corporate Sustainability Report, multiple sections
	Approach to stakeholder engagement	GRI 102-43	2020 Proxy Statement [b]
	Key topics and concerns raised	GRI 102-44	2020 Corporate Sustainability Report, multiple sections
	Entities included in the consolidated financial statements	GRI 102-45	2019 Annual Report [a]
	Defining report content and topic Boundaries	GRI 102-46	Our Approach to Reporting, p.8
	Reporting period	GRI 102-50	2019 fiscal year
	Date of most recent report	GRI 102-51	May 22, 2019
	Contact point for questions regarding the report	GRI 102-53	Scott Roy, Senior Vice President, 724-873-3218 sroy@rangeresources.com
Economic Topics			
Economic Performance	Direct economic value generated and distributed.	GRI 201-1	Economic Impacts, pp. 59-60
	Financial implications and other risks and opportunities due to climate change.	GRI 201-2	Climate Change, pp. 22-40
Indirect Economic Impacts	Significant indirect economic impacts.	GRI 203-2	Economic Impacts, pp. 59-60
Anti-Corruption	Communication and training about anti-corruption policies and procedures.	GRI 205-2	Code of Business Conduct and Ethics and Political Engagement, p. 17

[a] 2019 Annual Report: https://www.sec.gov/ix?doc=/Archives/edgar/data/315852/000156459020007459/rrc-10k_20191231.htm
[b] 2020 Proxy Statement: https://www.sec.gov/Archives/edgar/data/315852/000130817920000133/0001308179-20-000133-index.htm
[c] Company Website: Corporate Governance Page - http://www.rangeresources.com/company/corporate-governance
[d] Company Website – Code of Conduct and Business Ethics: http://www.rangeresources.com/company/corporate-governance/conduct-ethics
[e] Company Website – Political Engagement: http://www.rangeresources.com/company/corporate-governance/political-engagement

GRI Standards Index (cont)

Issue	Metric	Indicator	Relevant Range Resources Disclosures
Environmental Topics			
Materials	Recycled input materials used.	GRI 301-2	Waste Management, p. 45
Water	Interactions with water as a shared resource.	GRI 303-1	Water Management and Hydraulic Fracturing, pp. 45-49
	Management of water discharge-related impacts.	GRI 303-2	Water Management and Hydraulic Fracturing, pp. 45-49
	Water withdrawal.	GRI 303-3	Water Management and Hydraulic Fracturing, pp. 45-49
	Water discharge.	GRI 303-4	Water Management and Hydraulic Fracturing, pp. 45-49
	Water consumption.	GRI 303-5	Water Management and Hydraulic Fracturing, pp. 45-49
Biodiversity and Ecosystem	Significant impacts of activities, products, and services on biodiversity	GRI 304-2	Biodiversity and Ecosystems, pp. 41-42
	Habitats protected or restored.	GRI 304-3	Biodiversity and Ecosystems, pp. 41-42
Emissions	Direct (Scope 1) GHG emissions.	GRI 305-1	Performance Indicators, pp. 62-63
	Energy indirect (Scope 2) GHG emissions.	GRI 305-2	Performance Indicators, p. 62
	GHG emissions intensity.	GRI 305-4	Greenhouse Gas Emissions, pp. 32-40 Performance Indicators, pp. 62-63
	Reduction of GHG emissions.	GRI 305-5	Greenhouse Gas Emissions, pp. 32-40
	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions.	GRI 305-7	Performance Indicators, p. 63
Effluents and Waste	Waste by type (hazardous and non-hazardous) and disposal method.	GRI 306-2	Performance indicators, p. 65
Health and Safety			
Employment	Benefits provided to full-time employees that are not provided to temporary or part-time employees.	GRI 401-2	Employee Benefits, p. 51
	Parental leave.	GRI 401-3	Employee Benefits, p. 51
Occupational Health and Safety	Occupational health and safety management system.	GRI 403-1	Safety Leadership, pp. 18-21
	Hazard identification, risk assessment, and incident investigation.	GRI 403-2	Safety Leadership, pp. 18-21
	Occupational health services.	GRI 403-3	Safety Leadership, pp. 18-21
	Worker participation, consultation, and communication on occupational health and safety.	GRI 403-4	Safety Leadership, pp. 18-21
	Worker training on occupational health and safety.	GRI 403-5	Safety Leadership, pp. 18-21
	Promotion of worker health.	GRI 403-6	Safety Leadership, pp. 18-21
	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships.	GRI 403-7	Safety Leadership, pp. 18-21

GRI Standards Index (cont)

Issue	Metric	Indicator	Relevant Range Resources Disclosures
Health and Safety			
Local and Social Impacts	Workers covered by an occupational health and safety management system.	GRI 403-8	Safety Leadership, pp. 18-21
	Work-related injuries.	GRI 403-9	Safety Leadership, pp. 18-21 Performance Indicators, p. 64
Training and Education	Programs for upgrading employee skills and transition assistance programs.	GRI 404-2	Employee Engagement, pp. 50-54
Local and Social Impacts			
Diversity and Equal Opportunity	Diversity of governance bodies and employees.	GRI 405-1	Corporate Governance, pp. 13-17 Employee Engagement, pp. 50-54
Local Communities	Operations with local community engagement, impact assessments, and development programs.	GRI 413-1	Community Impact, pp. 55-60
Public Policy	Political contributions.	GRI 415-1	Political Engagement, p. 17

Task Force on Climate-related Financial Disclosures

Issue	Metric	Relevant Range Resources Disclosures
Governance	Describe the board's oversight of climate-related risks and opportunities.	Climate Change – Board and Management Oversight, pp. 22-23
	Describe management's role in assessing and managing climate-related risks and opportunities.	Climate Change – Board and Management Oversight, pp. 22-23
Strategy	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	Our Strategic Response to the Climate Policy Discussion, pp. 23-31
	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	Climate Change, pp. 22-40
	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Our Strategic Response to the Climate Policy Discussion, pp. 23-31
Risk Management	Describe the organization's processes for identifying and assessing climate-related risks.	Climate Change Risks and Opportunities, pp. 31-32
	Describe the organization's processes for managing climate-related risks.	Climate Change Risks and Opportunities, pp. 31-32
	Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	Climate Change Risks and Opportunities, pp. 31-32
Metrics and Targets	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	Climate Change, pp. 22-40 Performance Indicators, pp. 63-64
	Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas emissions and the related risks.	Climate Change, pp. 22-40 Performance Indicators, pp. 63-64
	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Climate Change, pp. 22-40

2019 Emissions Data Set

***Revised May 25, 2020**

	Previous	Revised
Net Production (Mmcfe)	833,354	833,354
Production-only Emissions (MT CO2e) (excluding gathering and boosting)	252,457	329,799
Production GHG Intensity (MT CO2e/Mmcfe	0.30	0.40
Total GHG Emissions Including boosting and gathering	288,938	366,280
Total Direct GHG Emissions (metric tons CO2e/Mmcfe)	288,938	366,280
GHG Emissions Intensity (metric tonsCO2e/Mmcfe)	0.35	0.44
Greenhouse Gas Emissions by Gas Type		
CO_2 Emissions (metric tons)	136,876	213,890
CH_4 Emissions (metric tons CO_2e)	151,918	152,063
N_2O Emissions (metric tons CO_2e)	144	327
CH_4 Emissions (metric tons)	6,077	6,083
CH_4 Emissions intensity (as % from total gas production from wells)	.0398	.0398
Greenhouse Gas Emissions by Source (metric tons CO_2e)		
Energy/Combustion Emissions	104,550	181,892
Other Vented Emissions	76,055	76,055
Fugitive Emissions	47,843	47,843
Emissions from Flared Hydrocarbons	33,054	33,054
Process Emissions	27,436	27,436

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