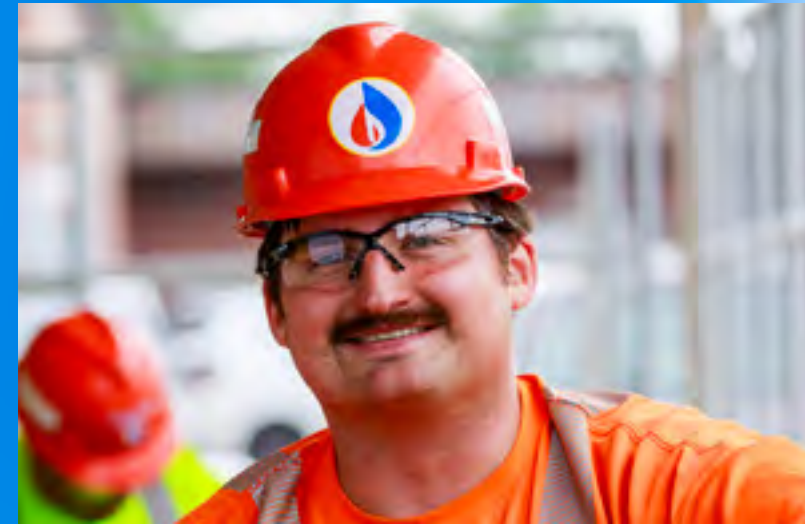




**National Fuel®**

**2023**

**Corporate  
Responsibility  
Report**



**Safe. Reliable. Affordable. Sustainable.**

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# Glossary of Terms:

Frequently used abbreviations, acronyms, or terms used in this report:

## National Fuel Gas Companies

**Company** – National Fuel Gas Company and its subsidiaries as appropriate in the context of the disclosure.

**Distribution Corporation** – National Fuel Gas Distribution Corporation

**Downstream Segment** – Downstream operations carried out by Distribution Corporation

**Empire** – Empire Pipeline, Inc.

**Foundation** – National Fuel Gas Company Foundation

**Highland** – Highland Field Services, LLC

**Midstream Company** – National Fuel Gas Midstream Company, LLC

**Midstream Segment** – Midstream operations carried out collectively by Supply Corporation, Empire and Midstream Company

**National Fuel** – National Fuel Gas Company

**Seneca Resources** – Seneca Resources Company, LLC

**Supply Corporation** – National Fuel Gas Supply Corporation

**Upstream Segment** – Upstream operations carried out by Seneca Resources

## Regulatory Agencies

**DCNR** – Pennsylvania Department of Conservation and Natural Resources

**DOT** – United States Department of Transportation

**EPA** – United States Environmental Protection Agency

**FERC** – Federal Energy Regulatory Commission

**NYNHP** – New York Natural Heritage Program

**NYPSC** – New York Public Service Commission

**NYSDEC** – New York State Department of Environmental Conservation

**PADEP** – Pennsylvania Department of Environmental Protection

**PAF&BC** – Pennsylvania Fish and Boat Commission

**PaPUC** – Pennsylvania Public Utility Commission

**PGC** – Pennsylvania Game Commission

**PHMSA** – Pipeline and Hazardous Materials Safety Administration

**OSHA** – Occupational Health and Safety Administration

**SEC** – Securities and Exchange Commission

**SHPO** – State Historic Preservation Office

**USACE** – United States Army Corps of Engineers

**USFWS** – United States Fish and Wildlife Service

## Other

**AGA** – American Gas Association

**API** – American Petroleum Institute

**AXPC** – The American Exploration and Production Council

**Bbl** – Barrel (of oil)

**Bcf** – Billion cubic feet (of natural gas)

**Bcfe (Mcf) – represents** – The total heat value (Btu) of natural gas and oil expressed as a volume of natural gas.

**Bcf (or Mcf) equivalent** – The Company uses a conversion formula of 1 barrel of oil = 6Mcf of natural gas.

**BMP** – Best management practice

**Capital expenditure** – Represents additions to property, plant, and equipment, or the amount of money a company spends to buy capital assets or upgrade its existing capital assets.

**CCAA** – Nationwide Candidate Conservation Agreement with Assurances

**CCUS** – Carbon capture utilization and storage

**CIP** – Conservation Incentive Program

**CISSC** – Corporate Information Security Steering Committee

**CLCPA** – New York Climate Leadership and Community Protection Act, or Climate Act

**Code** – Company's Code of Business Conduct

**DIMP** – Distribution Integrity Management Program

**EDM** – Engineering Design Manual

**EHS** – Environmental, health and safety

**EIA** – United States Energy Information Administration

**ERM** – Enterprise Risk Management

**ESCAMP** – Erosion and Sedimentation Control and Agricultural Mitigation Procedure

**ESG** – Environmental, social, and governance disclosures

**GHG** – Greenhouse Gas

**GHGRP** – United States EPA's Greenhouse Gas Reporting Program

**GRI** – Global Reporting Initiative

**HCA** – High consequence area

**IFC** – International Finance Corporation

**ILO** – International Labor Organization

**InfoSec** – Information security

**INGAA** – Interstate Natural Gas Association of America

**IPCC** – Intergovernmental Panel on Climate Change

**LiDAR** – Light Detection and Ranging

**LDAR** – Leak Detection and Repair

**LMI** – Low-Moderate-Income Portfolio

**MAOP** – Maximum allowable operating pressure

**MSC** – Marcellus Shale Coalition

**MMcf** – One million cubic feet

**NGSI** – National Gas Sustainability Initiative

**NMFR** – Near-miss frequency rate

**PNDI** – Pennsylvania Natural Diversity Inventory

**PNHP** – Pennsylvania Natural Heritage Program

**PSMS** – Pipeline Safety Management Systems

**PPE** – Personal protective equipment

**ROW** – Right-of-way

**RNG** – Renewable Natural Gas

**SASB** – Sustainability Accounting Standards Board

**SME** – Subject Matter Expert

**SMS** – Safety Management System

**STIMP** – Storage Integrity Management Program

**TCFD** – Task Force on Climate-Related Financial Disclosures

**TIMP** – Transmission Pipeline Integrity Management Program Plan

**TRIR** – Total recordable incident rate

**VOC** – Volatile organic compound

**WNA** – Weather normalization adjustment

**WEO** – World Energy Outlook



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# Dear Stakeholder,

Thank you for your interest in National Fuel Gas Company's 2023 Corporate Responsibility Report ("Report"). This Report builds on our previous disclosures, highlighting the Company's continuing focus on safely, sustainably, and cost-effectively producing, storing, transporting and distributing natural gas. We remain focused on operating our business with integrity and creating an organizational culture that promotes inclusion and respect. These important efforts are driven by our guiding principles of Safety, Environmental Stewardship, Community, Innovation, Satisfaction and Transparency, which provide a strong foundation for our organization and its over 2,200 dedicated employees. With our more than 120 years of operating history, National Fuel is committed to being a responsible corporate partner in the communities where we live and work, and producing and delivering an affordable energy source to our customers.



## **An Organizational Culture that Continues to Prioritize Safety**

Safety is a key focus area across our businesses. We value the safety of our customers, employees and communities, and continue to seek ways to further improve our safety culture. Our safety management systems provide the frameworks that aim to ensure safe, reliable and compliant operations, while our trainings, field guidance and management practices reinforce safety as a top priority for our employees and contractors. Additionally, we continue to engage with our customers and communities through our gas safety campaigns, which are designed to increase public awareness of pipeline locations and safety precautions. These systems, trainings and practices are integral to maintaining the integrity of our assets and safety of our teams.

## **Our Long-Standing Focus on Environmental Stewardship**

Across our organization, we remain committed to our guiding principle of environmental stewardship, which is reflected in our substantial, ongoing efforts to reduce our emissions and minimize our impacts on biodiversity. In 2023, we continued our work in this regard, prioritizing the efficient deployment of capital to reduce emissions and drive sustainability enhancements across our asset base.

## **Additional progress towards emissions reduction targets:**

Each of our businesses made further progress toward their 2030 methane intensity reduction targets, with our Exploration and Production business surpassing its initial target of 40%. While National Fuel has continued to grow, our methane reduction initiatives have helped reduce the Company's consolidated greenhouse gas emissions by more than 5% and our consolidated methane emissions by more than 17%, as compared to our 2020 baseline.

## **Responsible gas certifications:**

Our proactive emissions reduction efforts and best practices helped our Gathering and Exploration and Production businesses achieve and maintain responsibly sourced gas designations, which differentiates our operations and provides independent, credible verification of our corporate responsibility and sustainability policies, procedures and practices.

## **Furthering efforts to limit biodiversity impacts:**

We remain focused on further reducing environmental and natural resources impacts from our operations. This was evidenced in both our Upstream Segment's Surface Footprint Neutral Program, which commits to restoring one acre of land for every acre disturbed, and our Downstream and Midstream Segments' Pollinator Program, which enhances and expands monarch butterfly habitats on rights-of-way.

## **Furthering Our Culture of Integrity, Respect and Inclusion**

Our ongoing success is the direct result of our talented workforce and I am proud of the National Fuel team for its continued dedication to our customers and communities. To best serve our stakeholders, the Company strives to build a highly skilled and effective team that reflects a diversity of experience and backgrounds, and to create an inclusive work environment where all employees feel respected.

We remain committed to operating our business with integrity and treating all those we interact with respectfully. Our strong corporate governance practices reinforce this culture, while our employees remain the driving force behind our strong operational execution and positive community impacts.

## **Serving and Engaging with Our Communities**

With community as a guiding principle, and as a Company long-headquartered within our operating footprint, we are committed to the health and vitality of our local communities. Providing a safe, reliable and affordable energy source to our customers at all times of the year is paramount to the Company's success and mission. Additionally, the Company continues to support our local communities through positive economic development impacts, philanthropic giving, sponsorships and participation in community events, employee charitable giving

and volunteer programs. Our employees' enthusiasm to volunteer and engage with the communities where the Company operates was apparent during this year's Days of Doing Event where approximately a third of our workforce elected to volunteer with various nonprofits in New York, Pennsylvania and Texas, donating more than 2,300 total hours of their time.

## **The Future of Natural Gas – and National Fuel – Remains Bright**

Against the backdrop of the numerous initiatives and commitments described in this Report, and the overall strength of our business, I'm excited for the future of our industry and for National Fuel. Our integrated, diversified natural gas business provides National Fuel with the opportunity, across the value chain, to meet growing energy demand, and to do so with reliable, sustainable, affordable energy. And, I strongly believe that our "all of the above" approach to a just energy transition balances critical affordability, reliability and resiliency needs while driving emissions reductions.

The future is bright, and National Fuel's long history of strong operational execution and commitment to responsible and sustainable operations position us as a premier energy supplier well into the future.

**David P. Bauer**  
President and Chief Executive Officer



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# Executive Summary



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# Report Overview and Highlights

This Report provides discussion and analysis of National Fuel Gas Company's ("National Fuel" or the "Company") corporate responsibility and sustainability metrics, the Company's management of those metrics and the programs and policies in place to achieve National Fuel's commitment to the safe and environmentally conscious operation of its business. The Report includes updated disclosures from January 1 – December 31, 2023, and as appropriate, significant developments that have occurred since the end of this reporting period.

Disclosures within the Report are aligned with the Sustainability Accounting Standards Board (SASB) framework for each of National Fuel's principal business segments, referred to within the Report as the Company's Downstream, Midstream and Upstream segments, respectively, as well as certain disclosures under the Global Reporting Initiative ("GRI") standards. Additionally, in line with National Fuel's commitment to continuously

improving our corporate responsibility and sustainability initiatives, the Report builds on our previous disclosures and reports our further progress against emissions targets, ongoing sustainability initiatives and diversity and inclusion focused disclosures. A detailed listing of the location of the Company's disclosures within this Report, by framework and subject area, is located in the [Appendix](#).



## Overview

### GRI-Referenced Standards

- Governance and Social metrics

### SASB

- Downstream (Gas Utilities and Distributors)
- Midstream (Oil & Gas – Midstream)
- Upstream (Oil & Gas – Exploration & Production)

### TCFD

- Governance of sustainability
- Strategy concerning potential impacts of climate-related risks and opportunities and resiliency of our strategy under climate-related scenarios
- Risk management process to identify, assess and manage climate-related risks
- Metrics and targets used to assess and manage climate-related risks and opportunities

## Highlights

The Company is committed to continuously improving our corporate responsibility initiatives. Our Report builds on past disclosures with a focus on:

- Progress towards emissions targets and sustainability initiatives related to emissions reductions
- Focus on ecological impacts and nature-related conservation programs
- Waste management program and metrics
- Diverse representation in leadership development programs
- Internal audit review prior to publication
- Independent third-party verification of emissions data ([Appendix F](#))





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# Company Overview

National Fuel Gas Company is a holding company organized under the laws of the state of New Jersey and headquartered in Western New York. The Company is a diversified energy company engaged principally in the onshore production, gathering, transportation and distribution of natural gas.

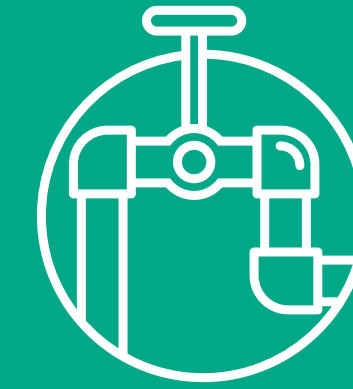
The Company operates an integrated business, with assets centered in Western New York and Pennsylvania, being used for, and benefiting from, the production and transportation of natural gas from the Appalachian basin. Current natural gas production development activities are focused in the Marcellus and Utica shales, geological shale formations that are present nearly a mile or more below the surface in the Appalachian region of the United States. Pipeline development activities are designed to gather, store and transport natural gas production to new and growing

markets. The common geographic footprint of the Company's subsidiaries enables them to share certain management, labor, facilities, and support services across various businesses and pursue coordinated projects designed to produce and transport natural gas from the Appalachian basin to markets in the eastern United States and Canada. The Company reports financial results for four business segments: Exploration and Production, Pipeline and Storage, Gathering and Utility,



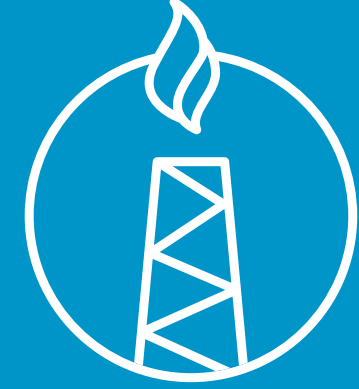
## Downstream

National Fuel Gas Distribution Corporation ("Distribution Corporation" or "Downstream Segment"), a New York corporation, carries out the Company's Utility operations. Distribution Corporation provides natural gas utility services to approximately 754,000 customers through a local distribution system located in Western New York and northwestern Pennsylvania. The principal metropolitan areas served by Distribution Corporation include Buffalo, Niagara Falls and Jamestown, New York and Erie and Sharon, Pennsylvania.



## Midstream

The Company's Midstream operations are carried out by the Company's Pipeline & Storage and Gathering subsidiaries (collectively the "Midstream Segment"). National Fuel Gas Supply Corporation ("Supply Corporation"), a Pennsylvania corporation, and Empire Pipeline, Inc. ("Empire"), a New York corporation, carry out the Company's Pipeline & Storage operations. Supply Corporation and Empire provide interstate natural gas transportation and storage services through integrated gas pipeline systems in Pennsylvania and New York. Wholly-owned subsidiaries of National Fuel Gas Midstream Company, LLC ("Midstream Company"), a Pennsylvania limited liability company, carry out the Company's Gathering operations. Through these subsidiaries, Midstream Company builds, owns, and operates natural gas gathering and compression facilities in Pennsylvania.



## Upstream

Seneca Resources Company, LLC ("Seneca"), a Pennsylvania limited liability company, carries out the Company's Exploration & Production operations. Seneca is engaged in the exploration for, and the development and production of, natural gas in the Appalachian region of Pennsylvania.



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# Our Guiding Principles

National Fuel understands that to deliver long-term sustainable value for the benefit of our stakeholders – shareholders, employees, customers, and the communities where we operate – we must continue to conduct our business activities in a way that promotes our six guiding principles. These principles underpin all aspects of our operations, as well as our daily interactions with our stakeholders.

 <p><b>Safety</b></p>	 <p><b>Environmental Stewardship</b></p>	 <p><b>Community</b></p>	 <p><b>Innovation</b></p>	 <p><b>Satisfaction</b></p>	 <p><b>Transparency</b></p>
<p>We value the safety of all our customers, employees and communities, and work diligently to establish a culture of safety that is embraced throughout the entire organization.</p>	<p>Environmental protection and conservation of resources are high priorities for National Fuel. We utilize procedures, technologies, and best management practices across our businesses to develop, build, and operate our assets in a manner that respects and protects the environment.</p>	<p>We are committed to the health and vitality of the local communities where we operate. We work where we live and raise our families, and are constantly focused on the highest standards of corporate responsibility and accountability.</p>	<p>We strive to exceed the standards for safe, clean and reliable energy development, embracing new technologies and investing in the future of our regions' energy resources. We envision a long and healthy future for our Company.</p>	<p>We work to deliver reliable, high-quality service for our customers. We want our shareholders to see a strong return on their investment. We want our employees to work in a positive, safe and rewarding environment. We want our communities to be proud to call us neighbors.</p>	<p>We believe that open communication is key to maintaining strong relationships. We see value in educating our shareholders, employees, customers and communities about all aspects of our business.</p>





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## Safe

National Fuel's number one priority is the safety of our customers, employees, contractors and communities. We continuously focus on system integrity, making natural gas a safe, viable option for our customers.

- ✓ **Emergency preparedness and response programs**
- ✓ **Prioritize asset integrity with safety management systems and compliance programs**
- ✓ **Employee and contractor training and development**
- ✓ **Customer outreach and education**



[Learn more about our Safety Programs detailed in this report.](#)



## Reliable

Given our weather-hardened infrastructure, natural gas remains a reliable and resilient option for our customers at all times of the year.

- ✓ **Near 100% service reliability in both Downstream and Midstream Segments**
- ✓ **Strategic planning and coordination to minimize weather-related production interruptions in Upstream Segment**



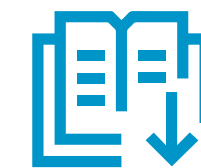
[Learn more about our Reliability detailed in this report.](#)



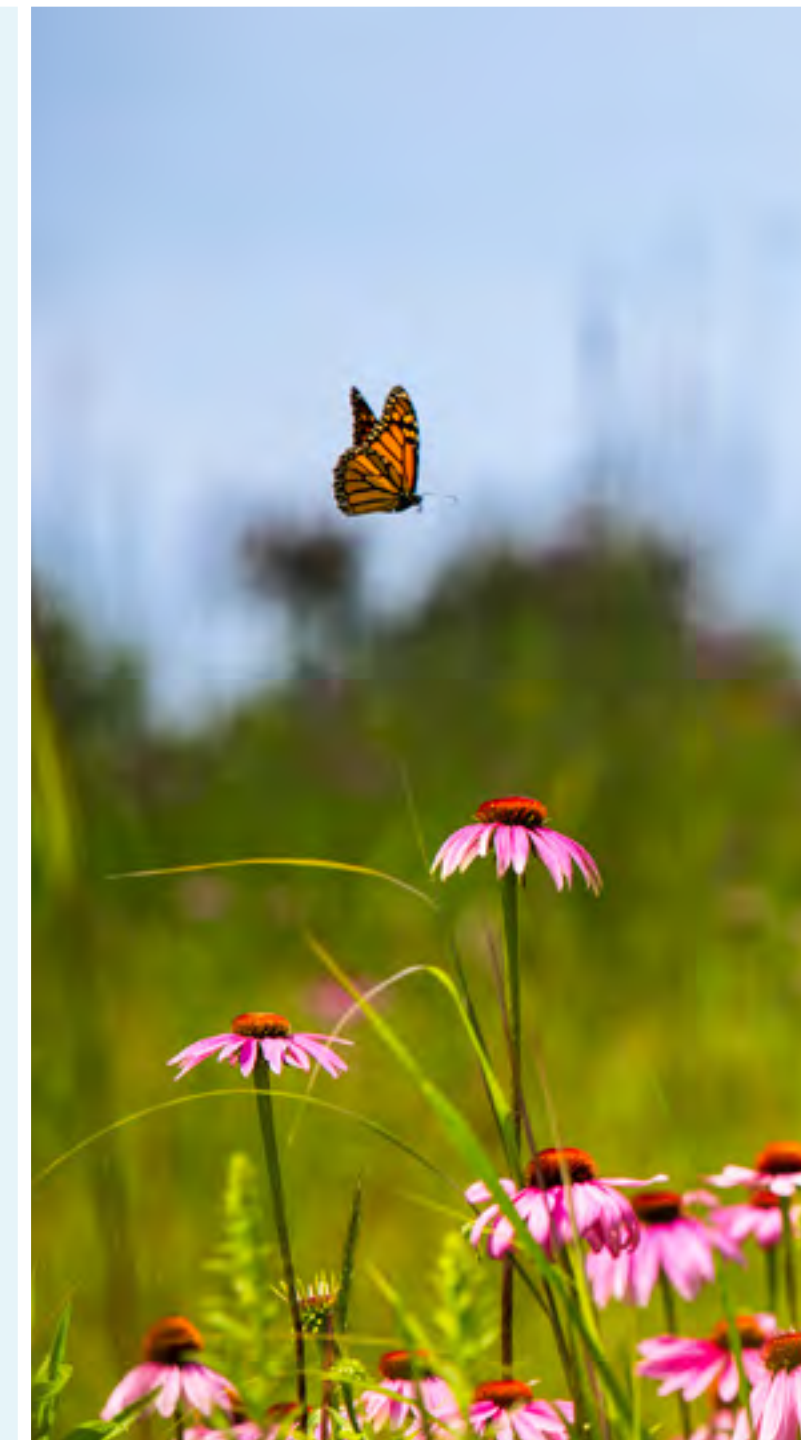
## Affordable

Natural gas remains the most affordable energy source within our service territories for residential customers.

- ✓ **Utility's 2023 residential delivery gas rates amongst the lowest in the northeastern United States**
- ✓ **End-use customers benefit from Appalachian shale development and its impact to availability and affordability of natural gas in the region**



[Learn more about our Affordability detailed in this report.](#)



## Sustainable

We believe natural gas remains an integral part of the transition to a low-carbon economy. National Fuel is committed to developing responsibly sourced gas, maintaining a safe and sustainable system and pursuing responsible GHG emissions reduction initiatives.

- ✓ **Ongoing sustainability initiatives drive significant progress towards our methane intensity emissions reduction targets**
- ✓ **Procedures to minimize ecological impacts and conservation programs to enhance local habitats**



[Learn more about our Sustainability detailed in this report.](#)



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# Strong Corporate Governance Practices

## Our Diverse, Experienced and Independent Board of Directors

The Company's Board of Directors is composed of individuals with diverse and extensive leadership experience in the energy sector and other, complementary industries and professions. The Company believes that it is important that the composition of the Board reflect a diversity of experience

and perspectives relating primarily, but not exclusively, to the Company's business segments and operating footprints.

National Fuel's Nominating/Corporate Governance Committee, chaired by Rebecca Ranich, identifies potential nominees for director positions, and as part of that mission, invites qualified diverse candidates to stand for election to the Board. Although currently at a full complement of directors, since 2016 the Board

has added three diverse directors and will continue to focus on diversity when vacancies arise in the future.

To assist in this effort, the Company's [Corporate Governance Guidelines](#) incorporate the "Rooney Rule," which requires that the Nominating/Corporate Governance Committee endeavor to include in any initial candidate pool, qualified racially, ethnically and/or gender diverse candidates.

## Our Board Composition



- ✓ **91% Independent**
- ✓ **27% Diverse (includes gender and racial/ethnic diversity)**
- ✓ **Designated Lead Independent Director**
- ✓ **Annual Election of all Directors**
- ✓ **Separate roles of Chairman of the Board and Chief Executive Officer**

## Our Engagement Approach with Investment Community Stakeholders

In line with the Company's guiding principle of transparency, National Fuel believes that continued engagement with stakeholders is key to maintaining positive relationships and strong corporate governance practices.

Members of Company management periodically engage with shareholders and proxy advisory firms throughout the year to obtain feedback on matters of interest to them, including corporate responsibility and sustainability matters. The Board has also directed management to continue to engage as appropriate with interested shareholders, and to inform the Board of requests for meetings with its members.

### We Regularly Engage with Investment Community Stakeholders ...

- Institutional Investors
- Retail Shareholders
- Proxy Advisory Firms
- ESG Rating Agencies
- Credit Rating Agencies

### On Important Operational, Strategic and Sustainability Topics...

- Climate/Sustainability
- Human Capital
- Diversity
- Executive Compensation
- Board Composition
- Business Strategy and Operations
- Key Industry Developments

### Through Various Forms of Communication...

- Investor Meetings
- Industry/Analyst Conferences
- Quarterly Earnings Calls
- Investor Relations Website
- Annual Shareholder Meeting
- Annual/Periodic Company Reports and Publications

### Driving Further Discussion and Understanding.

- Board and Company management value and consider shareholder feedback
- Engagement allows the Company to address stakeholder comments and further enhance its disclosures and initiatives, where appropriate

<sup>1</sup> The graph reflects the current makeup of the Company's Board of Directors as of September 1, 2024. In accordance with the NYSE Listed Company Manual, the Company does not consider a director independent if he or she is, or has been within the last three years, employed as an executive officer of the Company.



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## Leadership and Governance – Business Ethics

National Fuel seeks to promote and maintain a culture committed to high standards of ethical conduct and integrity. The Company communicates its expectations for responsible and ethical conduct through our Code of Business Conduct and Ethics (the Code), which is applicable to the Company's directors, officers and employees. The Code reflects the Company's long-standing commitment to adhere to high standards of ethics and integrity which are designed to deter wrongdoing, promote honest and ethical conduct and reinforce compliance obligations.

### Managing Business Ethics Internally

The Company's internal Ethics Committee, chaired by the Company's General Counsel, administers the Code as it relates to Company employees who are not executive officers and regularly reports on its activities to the Audit Committee. The Audit Committee is responsible for administering the Code as it relates to the Company's directors and executive officers. Additionally, the Audit Committee monitors compliance with the Company's Code and reviews management's response to violations of the Code. Discipline may be imposed for violations of the Code, including, where appropriate, termination of the offending individual's relationship and/or employment with the Company.

All Company employees share the responsibility for making ethical conduct central to our business operations and dealings. The Company's Employee Handbook Policy explains and elaborates on what is expected of all employees to comply with the Code, and outlines Company policies relating to compliance with laws, rules and regulations.

Employee Handbook Ethics Topics:

- Improper corporate payments, including bribes, kickbacks and/or gifts
- Political contributions
- Equal employment opportunity
- Non-discrimination and anti-harassment
- Health and safety
- Environmental compliance
- Business records/record retention

Additionally, on an annual basis, National Fuel takes various steps to ensure compliance with the Code:

- **Employee annual ethics disclosure:** Officers and supervisory employees are required to provide a personal statement of disclosure relating to any conflicts of interest and any known occurrences of fraud.
- **Availability of anonymous toll-free hotline and dedicated website:** Officers and employees may use the Company's toll-free hotline or dedicated website to anonymously report suspected wrongdoings, possible conflicts of interest or fraud. The same hotline and website are also publicized

on the Company's website, internal intranet and common areas throughout National Fuel's offices. For calendar year 2023, the hotline received six reports, which included three test reports. Each report was investigated in a timely manner and it was determined that no violation occurred, and in limited cases minor process improvements were implemented.

- **Employee ethics and compliance training:** The Company requires employees to undergo additional ethics and compliance training with respect to conducting business with government officials including potential actions that could constitute bribery or corruption.

### Managing Business Ethics with Our Business Partners

The Company expects its business partners to comply with the standards of conduct set forth in the Code, the [Company's Supplier Code of Conduct Policy](#), [National Fuel's Labor & Human Rights Policy](#) and contractual obligations to National Fuel. The Company sends an annual letter to vendors, suppliers and contractors highlighting the Code, the standards therein, and the Company's expectation that vendors are aware of and comply with those standards (the "Supplier Ethics Letter"). The [Supplier Ethics Letter](#) communicates the Company's expectation that vendors, suppliers and contractors carefully consider, and comply with, National Fuel's business ethical standards. Among other standards, the Supplier Ethics

Letter highlights that National Fuel employees may not, under any circumstances:

- Use their position as a National Fuel representative for personal gain through preferential treatment of vendors, suppliers or contractors;
- Place themselves in a position that compromises their integrity or represents a conflict of their personal interest with National Fuel's interests; or
- Require vendors, suppliers or contractors to participate in or support any group, activity, political campaign or organizations as a requirement of doing business with National Fuel.

The Supplier Code of Conduct Policy communicates to our business partners the Company's expectations that they conduct business with integrity and ensure that their employees, workers, representatives and subcontractors do the same. Among other things, this policy addresses the Company's expectations with respect to the following:

- Business Conduct and Ethics
- Anti-Corruption
- Non-Discrimination and Protection of Classes
- Diversity and Inclusion
- Labor Practices and Employment Practices
- Information Security, Privacy and Data Protection
- Safe, Secure and Healthy Workplace
- Environmental Practices
- Compliance and Reporting Violations





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**Governance – Political Advocacy**

The Company is committed to maintaining the highest ethical standards when engaging in political activity. As the natural gas industry is highly regulated at the local, state and federal levels, the decisions made by policymakers can directly impact all aspects of the Company's operations. National Fuel advocates for policies that benefit our customers, employees, shareholders and the communities we serve. We believe our participation in the political process serves all of our stakeholders' interests by creating a more informed policy-making process. National Fuel's [Political Activities Principles](#) further address the Company's fundamental engagement principles, political contributions program, the Company's political action committees and lobbying activities, membership in organizations, political expenditures, and trade/business association expenditures, including dues allocated to lobbying.

**Governance – Information Security**

National Fuel believes that strong information security is critical to the Company's success and therefore is committed to continuously reevaluating and strengthening the Company's data privacy and cybersecurity posture. To fulfill this commitment, the Corporate Information Security Steering Committee ("CISSC") meets quarterly to discuss emerging information security risks and the Company's corresponding mitigation and defense efforts.

Led by the Company's Chief Information Officer ("CIO") and Chief Information Security Officer ("CISO"), the CISSC is comprised of Information Security (InfoSec) professionals, leadership from key departments and the Company's senior management. The Company's CISO regularly provides information security updates to the Board. Information security risks are also identified and assessed as part of the Company's enterprise risk management program, which the Board is briefed on quarterly.

National Fuel's Information Security Program is aligned to the Cybersecurity Framework published by the National Institute of Standards and Technology. The InfoSec team is dedicated to promoting security awareness through personnel training and regularly reviewing internal information security policies, monitoring for anomalous behavior, investigating potential security events, mitigating vulnerabilities and assisting business partners with the goal of providing secure and resilient systems. The InfoSec team meets weekly with key Information Technology and Operation Technology leadership to discuss potential cybersecurity threats and review alerts.

National Fuel periodically reevaluates its Information Security Program to assess whether planned initiatives are appropriate and to ensure that risk mitigation and defense efforts remain robust.



**Company Initiatives for the Information Security Program**

Training & Internal Policies	External Audits	Information Security Breaches
<ul style="list-style-type: none"> <li>• All employees and contractors with access to Company systems complete annual information security training</li> <li>• InfoSec provides additional training to high-value targets</li> <li>• InfoSec reviews and updates Company information security and device policies regularly</li> <li>• Employees are provided with comprehensive information security awareness initiatives and resources including security awareness training through simulated phishing emails, cyber-risk announcements, targeted 'bite-sized' cyber training sessions and active participation in National Cybersecurity Awareness Month</li> <li>• The Board receives periodic, and as-needed, updates on cyber threats and trends</li> </ul>	<ul style="list-style-type: none"> <li>• The Company annually engages multiple independent cybersecurity vendors to perform assessments on all aspects of the Information Security program</li> <li>• InfoSec voluntarily participates in one-off assessments focused on different information security issues performed by various U.S. federal and state agencies:               <ul style="list-style-type: none"> <li>— Cybersecurity and Infrastructure Security Agency</li> <li>— Transportation Security Administration</li> <li>— Department of Homeland Security</li> <li>— Federal Energy Regulatory Commission</li> <li>— New York Public Service Commission</li> <li>— Pennsylvania Public Utility Commission</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• InfoSec performs ongoing comprehensive investigations of our systems and to the best of our knowledge the Company has not experienced an information security breach to these systems</li> <li>• InfoSec maintains contracted relationships with forensic investigation, crisis communications, credit monitoring and legal service providers in the event of a breach</li> <li>• InfoSec conducts annual tabletop exercises to test our Information Security Incident Response Plan and Procedures</li> <li>• The Company maintains cybersecurity liability insurance</li> </ul>



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## Governance of Corporate Responsibility, Sustainability and Climate Risk

The Board's structure and responsibilities are outlined in the Company's [Corporate Governance Guidelines](#). Individual committees offer expertise and oversight, including on specific ESG factors.

Nominating/Corporate Governance Committee	Compensation Committee	Audit Committee
<p><b>Oversight Responsibilities:</b></p> <ul style="list-style-type: none"> <li>Corporate Governance Principles</li> <li>Oversight of corporate responsibility and sustainability (standing agenda item at Committee meetings)</li> <li>Board composition and diversity</li> <li>Board evaluations</li> </ul>	<p><b>Oversight Responsibilities:</b></p> <ul style="list-style-type: none"> <li>Compensation philosophy and practices</li> <li>Executive compensation tied to corporate responsibility and sustainability metrics</li> </ul>	<p><b>Oversight Responsibilities:</b></p> <ul style="list-style-type: none"> <li>Financial statement integrity</li> <li>Internal control systems</li> <li>Audit processes and annual risk-based audit plan</li> <li>Enterprise Risk Management (ERM) process; includes climate-related risks<sup>1</sup></li> </ul>
<b>Number of Meetings: 4<sup>2</sup></b>	<b>Number of Meetings: 5<sup>2</sup></b>	<b>Number of Meetings: 9<sup>2</sup></b>
<input checked="" type="checkbox"/> <b>100% Independent<sup>3</sup></b>	<input checked="" type="checkbox"/> <b>100% Independent<sup>3</sup></b>	<input checked="" type="checkbox"/> <b>100% Independent<sup>3</sup></b>

Oversight for corporate responsibility and sustainability flows from the Nominating/Corporate Governance Committee of the Board to our CEO and President, and throughout the Company via our Corporate Responsibility Executive Committee, of which the CEO is Chair. The Executive Committee is made up of the Company's senior executive team.

<sup>1</sup> The ERM process is reviewed quarterly during the Audit Committee meetings, which all directors are invited to attend. However, the entire Board of Directors maintain oversight and responsibility of enterprise risks.  
<sup>2</sup> Reflects number of meetings held during fiscal year 2023. Each Committee met on a quarterly or more basis, at meetings which are typically attended by the entire Board.  
<sup>3</sup> All members of the Nominating/Corporate Governance, Compensation and Audit Committees are independent, as independence is defined in NYSE listing standards.

## Our Governance of Sustainability

### Nominating/Corporate Governance Committee

Oversees and provides guidance on corporate responsibility and sustainability initiatives, strategies and decision-making.

### Corporate Responsibility Executive Committee

Responsible for implementation and development of corporate responsibility and sustainability strategies. Participates in the enterprise risk management process.

### Corporate Responsibility Officer

Executive responsible for corporate responsibility disclosure and advancing the Company's corporate responsibility priorities.

### Corporate Responsibility Management Committee

Responsible for prioritizing progression of corporate responsibility and sustainability priorities in specific subject matter expert areas, as well as updating Company disclosures.

Governance and Risk Management SMEs

Human Capital Development SMEs

Environmental, Health and Safety SMEs

Energy Transition SMEs



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## Risk Oversight and Risk Management

The Board maintains close oversight of the assessment and mitigation of risks facing the Company. Through an Enterprise Risk Management (ERM) process, the Company identifies key “foundational risks” and, among five major risk categories (listed in the graphic to the right), specific “critical” and “potentially emerging” risks. The Board routinely assesses these risks, along with any newly identified risks, on a quarterly basis at the Audit Committee meetings. These meetings are typically attended by the entire Board. In addition, management provides a detailed presentation on a topic related to one or more risk categories at each quarterly Board meeting. Additional review or reporting on enterprise risks is conducted as needed or as requested by the Board.

The ERM process informs all aspects of Company business planning and execution. Further, the Board directs management to integrate corporate responsibility considerations into decision-making throughout the organization. The Audit Services Department, reporting to the Audit Committee, considers significant risk categories identified through the ERM process when creating its internal annual audit plan.

To facilitate the ERM process, an internal ERM team, reporting to the General Counsel, regularly confers with business unit officers, managers and subject matter experts to identify risks, provide initial risk assessments and review

previously-identified risks. The team’s findings and recommendations are then brought before senior management for further analysis. Risks are ranked based on likelihood of occurrence and severity of impact. Each identified risk is assessed on a 1-year, 5-year and 20-year basis.

Foundational risks are the key risks that the Company constantly monitors and mitigates. These risks are typically known, stable and routine, and are managed through established controls. Critical risks could potentially have a significant impact on the Company’s business objectives if not managed properly. Emerging risks are novel or developing risks that are not yet fully understood or quantified. They may arise from external changes such as technology or economic shifts, or consumer or regulatory changes that are not yet fully known.

Based on this analysis, the senior management team assesses the significance of the identified risks to the Company. For those identified as critical risks, the ERM team provides to the Board a more detailed narrative, outstanding items of interest taken into consideration when assessing that risk and the current mitigation measures for that risk.

Our senior management team is responsible for reviewing the application of the Company’s ERM process and for reviewing the effectiveness of corporate strategy in prioritizing, addressing and mitigating critical risks, including climate risks. Business unit leaders are responsible for ensuring compliance with current risk management plans, and considering and developing,

where warranted, additional mitigative measures for critical risks depending on senior management’s decision with respect to the risk ranking.

### Risk Management – Business Continuity Planning

National Fuel maintains a robust business continuity program to ensure the Company can respond effectively to a crisis. A comprehensive Incident Management Plan and a interdepartmental Incident Management Team support the program.

The team proactively tests the plan annually to verify the Company’s readiness to respond to natural disasters or large-scale pipeline or information technology system events. In 2023, the team conducted an in-depth simulation of, and response to, a realistic pipeline system incident. When simulating its response to this scenario, the team addressed critical topics, including but not limited to: operational priorities; recovery operations; coordinating with emergency responders, law enforcement and regulatory agencies; pipeline system safety and reliability; mutual aid; and internal and external communications.

The team identified opportunities for improvement during the simulation to further strengthen National Fuel’s ability to respond to a major incident in accordance with our guiding principles.

## Our ERM Framework

**Foundational Risks:** Key risks that the Company constantly monitors and mitigates.

**Critical Risks:** Any identified risks assessed with a high severity in the 1-year or 5-year assessment regardless of likelihood, or any risks that have a sustained high likelihood of occurrence in the 1-year and 5-year assessments regardless of severity.

**Potentially Emerging Risks:** Any risks with a low severity and likelihood in the 1-year and 5-year assessments, or any risks that have a sustained low severity in the 1-year and 5-year assessments, but a high likelihood of occurrence in the 5-year assessment.

**Critical Risks and Potentially Emerging Risks** are rated within an ERM matrix according to the following criteria:

- **Likelihood:** Measures how likely a risk will occur within the risk assessment period with current controls and mitigation measures in place.
- **Severity:** Measures how significant the risk impact is to the Company (primarily considers financial impact, impact to stock price, and reputational risk).

### Major Risk Categories





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## Management of Climate-Related Risk and Climate Strategy

The Company has elected to implement the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), aligning our climate-related risk reporting with the four central themes of the TCFD – Governance, Strategy, Risk Management and Metrics and Targets. In furtherance of these efforts, in 2022, the Company published its inaugural Climate Report. Overall, the Company continues to take important steps to position its business to play a meaningful role in a lower carbon economy. The Company's [Climate Report](#) describes many of those efforts, highlighting the resilience of its operations to potential risks associated with climate change and identifying opportunities to further participate in the ongoing energy transition.

Building on our sustainability, governance and risk oversight disclosures, National Fuel has enhanced its climate-risk disclosure in its Climate Report through 1) identifying climate-related risks and opportunities, 2) describing how these climate-related risks and opportunities may impact the Company's strategy and financial planning, 3) describing how these climate-related risks are identified, assessed and managed through our ERM process, and 4) disclosing metrics and targets related to each of our businesses.

### Climate Risk Assessment

The Company recognizes the ongoing developments and risks surrounding climate change, as well as the corresponding opportunities with the transition to a low-carbon economy. The Board and management consider these risks and opportunities and their corresponding impacts on the organization's businesses and strategy through the ERM program, strategic planning process and capital spending decision process. When evaluating the impact of climate-related risks, the Company considers short, medium and long term time horizons and whether the identified risks could have a potential financial impact on the Company within those time horizons.

### Climate-Related Risks and Potential Impacts

The Company considers climate-related risks as part of its ERM process, which ultimately informs corporate strategy and the capital spending decision process. The TCFD identifies two categories of climate-related risks – physical risks and transitional risks.

Given the Company's weather-hardened infrastructure and geographic location, our comprehensive review of future climate-related physical risks indicated that there is a low financial risk exposure to the Company. The risks that have the potential to be the most impactful for the Company in the medium-term and long-term are outlined on the next page.



**Restoration Focused on Pollinators:** National Fuel employees and consultants participate in a field exercise to locate monarch butterfly habitats on a restored pipeline right-of-way. The Company participates in the Nationwide Candidate Conservation Agreement with Assurances to enhance and expand available monarch butterfly habitats through conservation measures.





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**Climate-Related Physical Risks**

Risk Category	Risk	Potential Impacts
<b>Acute</b>	<ul style="list-style-type: none"> <li>More frequent and severe weather events</li> </ul>	<ul style="list-style-type: none"> <li>Business interruption or system shutdown leads to reduced margins</li> <li>Increased costs for operational damage</li> <li>Increased insurance premiums</li> </ul>
<b>Chronic</b>	<ul style="list-style-type: none"> <li>Long-term shift in climate patterns resulting in new storm patterns or chronic increased temperature</li> </ul>	<ul style="list-style-type: none"> <li>Increased pricing volatility due to changing weather pattern</li> <li>Supply chain disruption</li> </ul>

**Climate-Related Transitional Risks**

Risk Category	Risk	Potential Impacts
<b>Policy and Legal</b> (Legislation, regulation, and litigation)	<ul style="list-style-type: none"> <li>Regulatory and Legislative Initiatives</li> <li>Carbon fees and cap-and-trade programs</li> <li>Lack of support for system modernization</li> <li>More stringent emissions regulations or regulatory changes require major system remediation or changes in operating practices</li> <li>Revisions to federal statutes, laws or policies related to the drilling or completion of natural gas wells</li> <li>Political risks associated with climate pledges</li> <li>Regional or statewide natural gas bans</li> <li>Limited geographic footprint</li> <li>Ban on hydraulic fracturing or increased permitting/operating requirements</li> <li>Increased permitting requirements surrounding water usage and management for production operations</li> <li>Increased government subsidies for alternative energy sources</li> </ul>	<ul style="list-style-type: none"> <li>Increased costs and reduced revenue from reduction in consumer demand based on incremental costs for usage</li> <li>Negative rate case results</li> <li>Increased costs for system investment without rate recovery</li> <li>Lower throughput/demand for natural gas</li> <li>Production curtailment and related revenue impacts</li> <li>Decreased revenues</li> <li>Inability to recover financial investment in assets</li> <li>Limited pool of potential investors to finance growth</li> <li>Access to, and cost of, capital negatively impacted</li> </ul>
<b>Technology</b> (Improvements or innovations that support decarbonization)	<ul style="list-style-type: none"> <li>Decreased natural gas demand due to renewable energy adoption/technology developments</li> </ul>	<ul style="list-style-type: none"> <li>Increased insurance premiums</li> <li>Increased shareholder activism leads to higher costs</li> <li>Prolonged project timelines and increased construction costs</li> </ul>
<b>Markets</b> (Shifts in supply and demand for fossil fuels)	<ul style="list-style-type: none"> <li>Shifts in supply and demand for natural gas</li> </ul>	<ul style="list-style-type: none"> <li>Limited growth opportunities</li> <li>Impact on share price</li> </ul>
<b>Reputation</b> (Changes in customer and community perceptions and behaviors)	<ul style="list-style-type: none"> <li>Investors shift away from carbon-intensive industries</li> <li>Financial counterparty restrictions for carbon-intensive companies</li> <li>Increased opposition to new projects/facilities</li> <li>Employee attraction and retention</li> <li>Litigation and lobbying aimed against carbon-intensive companies</li> </ul>	

**Medium-Term Transitional Risks**

- Policy and Regulatory Changes:** Regulatory changes at the federal, state and/or local levels could create lack of support for system modernization or require facility modifications, including potential new requirements aimed at reducing emissions for new and existing facilities, increasing capital needs or operating costs, or restricting existing operations.
- Project Opposition:** Opposition during the project/facilities planning phase, or during or after construction, could limit growth opportunities if projects become difficult to construct due to prolonged timelines and increased construction costs.
- Decreased Demand for Natural Gas:** Demand for natural gas could decrease through renewable energy adoption and subsidization, which could lead to decreased margins, or the inability to recover the Company's financial investment in assets.

**Long-Term Transitional Risks**

- Policy and Regulatory Changes:** Evolving federal, state and local statutory and/or regulatory approaches could negatively impact the Company's ability to grow or maintain its operations and assets. Potential developments could include regional or statewide bans on natural gas, including the installation of new natural gas equipment and facilities; increased restrictions on certain operating practices; and cap-and-trade, severance tax and/or carbon tax implementation.
- Financial Counterparty Restrictions for Carbon-Intensive Industries:** Access to, and cost of, capital could be negatively impacted due to limitations and restrictions on sources of funding, or insurer divestment from carbon-intensive industries could lead to increased insurance premiums.
- Project Opposition** (see Medium -Term Risks)
- Decreased Demand** (see Medium -Term Risks)



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## Management of Regulatory Risks

As part of the risk identification process, the Company identifies legislative and regulatory risks that could impact the Company financially. The Company's businesses are subject to regulations under a wide variety of federal, state and local laws, including regulations and policies related to environmental impacts and climate change. Existing statutes and regulations may be revised or reinterpreted and new laws and regulations may be adopted or become applicable to the Company, which may affect the Company's operations and financial results in ways that are difficult to predict. The natural gas industry's operations are subject to an increasingly rigorous regulatory regime with respect to environmental and ecological impacts. Additionally, the trend toward increased conservation, competition from renewable energy sources and technological advances to address climate change may reduce the demand for natural gas. The Company regularly reviews and evaluates the impacts that these legislative and regulatory changes and trends may have on our business segments.

- **New York:** The Company has heavily-regulated operations and facilities for both its Downstream Segment and Midstream Segment in New York.
  - **New York's Climate Act:** The Act which created emissions reduction and electric generation mandates, and related regulatory actions, could impact

the Downstream Segment's customer base and create greater challenges in the development of natural gas infrastructure. New York State enacted legislation that includes a natural gas ban for certain new construction beginning in 2026.

- **Process to Develop New York Cap-and-Invest Program:** New York regulators are in the process of developing a cap-and-invest program, which aims to achieve the goals of the Climate Act through the assessment of a fee per metric ton of greenhouse gas emitted from certain facilities and operations. The Company is actively engaged in this process as to potential impacts on its customers and business.

- **Pennsylvania:** Methane reduction framework for the oil and gas industry has resulted in permitting changes with the stated goal of reducing methane emissions from well sites, compressor stations and pipelines.
- **Federal:** The Company has long been subject to an array of federal regulations focused on environmental impacts but has recently seen a significant increase in regulatory changes focused on emissions that may require changes to its various segments' operating practices, systems and emissions reduction targets.

- **EPA Methane Rule:** Applies to the Company's Midstream and Upstream Segments. New, modified and reconstructed facilities will be required

to comply with, among other things, monitoring and emissions standards for certain equipment, increased leak detection and repair requirements and replacement of certain equipment. States are required to enact similar provisions for existing facilities within the next five years.

- **Updated EPA Greenhouse Gas Reporting Program (GHGRP) Rules:** Applies to all Company Segments. Requires operators to revise calculations, record-keeping, and reporting of greenhouse gas emissions through updated methodologies and new and updated source emission factors (effective January 2025).
- **EPA Proposed Waste Emissions Charge:** Expected to be applicable to the reported annual methane emissions of certain oil and gas facilities above specified methane intensity thresholds, starting in 2025 for calendar year 2024 reported emissions.

Legislation or regulation that aims to reduce emissions could also include GHG emissions limits and reporting requirements, carbon taxes, restrictive permitting, increased energy efficiency standards and incentives or mandates to conserve energy or use renewable energy sources.





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## Identification and Evaluation of Climate-Related Opportunities

Natural gas has played a pivotal role in driving significant reductions in regional and national GHG emissions over the past decade. The Company believes that natural gas will remain an important part of the future energy solution as the regional and national focus remains on reducing emissions.

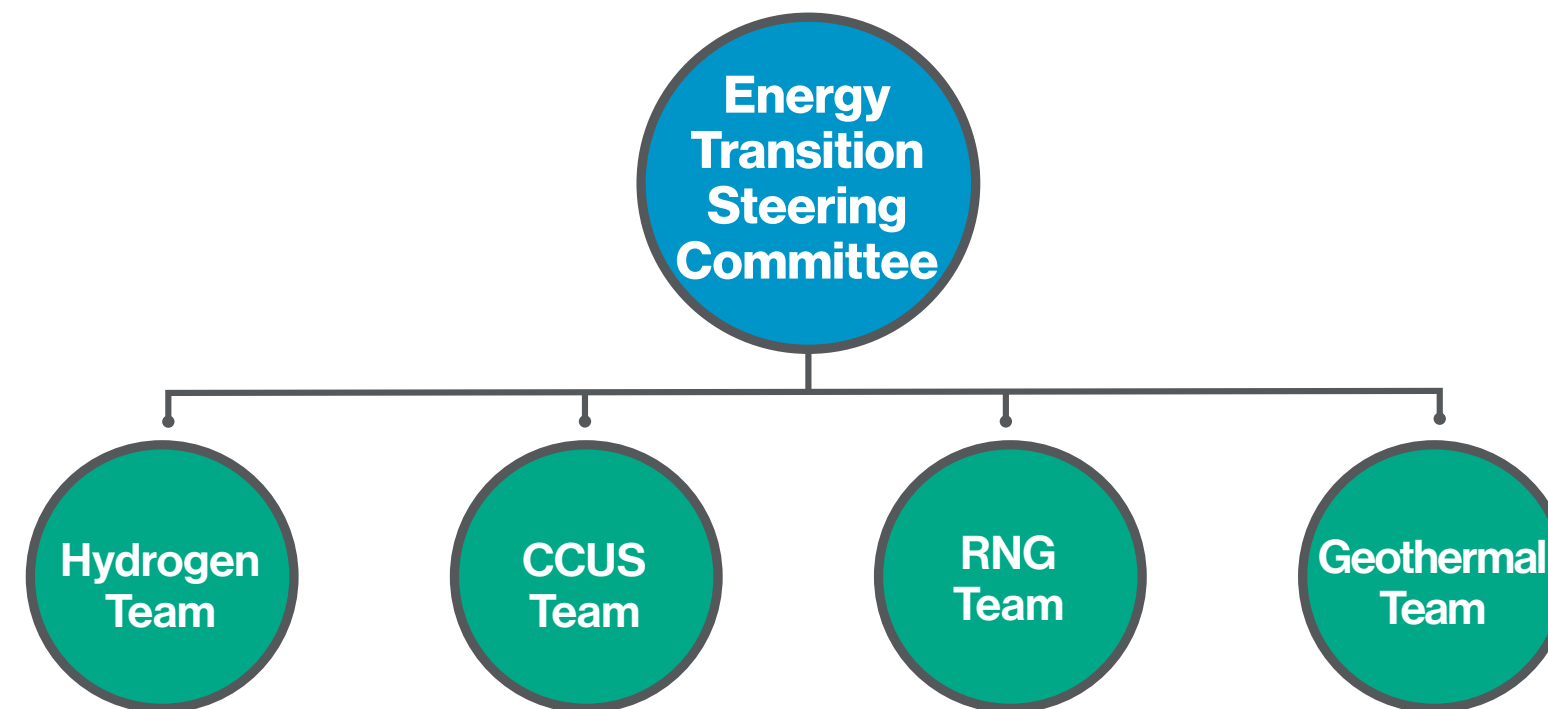
The Company expects that there will be a long-term need for natural gas, particularly Appalachian natural gas production, which has a much lower carbon intensity than other basins within North America. The Company expects that natural gas will continue to meet the energy needs for critical industrial processes, as well as for consumers in cold weather regions such as the Northeastern United States, and the colder regions of New York State, such as Western New York, due to its reliability and affordability,

remaining a fuel of choice for end-users. We also expect that natural gas will play a long-term, critical role complementing the expansion of intermittent energy sources, including wind and solar, providing a readily dispatchable and reliable energy source during periods when renewable energy is unable to meet increased energy demand or is otherwise unavailable. Climate-related opportunities arise through the Company's pursuit of mitigating climate-related risks, as well as the Company's consideration of business development opportunities presented as part of the transition to a low-carbon economy.

The Company's Energy Transition Steering Committee guides Company investment opportunities as the economy moves toward emissions reduction. The Committee's goal is to reduce the Company's emission profile and find new business development opportunities. The Steering Committee is made up of various members of the Company's senior management team.

The Company has also developed specific teams made up of technical, regulatory and business development subject matter experts focused on Hydrogen, Carbon Capture Utilization and Storage (CCUS), RNG and Geothermal. Each team reports up to the Energy Transition Steering Committee, which is tasked with reviewing the team's progress, establishing next steps and providing direction on time and resource allocation that will best position the Company for the future.

Currently, the Company is pursuing ways to improve resource efficiency and lower emissions, as well as exploring alternative low- and zero-carbon fuel sources. The potential impact of these climate-related opportunities could include operational efficiencies resulting in increased revenue and lower costs, greater access to capital at a potentially lower cost due to the Company's reduced carbon footprint, and increased revenues, earnings and cash flows driven by execution of business development opportunities.



## Identified Opportunities under the TCFD Framework

TCFD Category	Climate-Related Opportunities
<b>Resource Efficiency</b>	<ul style="list-style-type: none"> <li>• Modernize existing equipment to minimize emissions</li> <li>• Install low-emissions technology on new facilities</li> <li>• Maximize recycling of produced water</li> <li>• Promote customer efficiency</li> <li>• Use more efficient distribution and production processes</li> </ul>
<b>Energy Source</b>	<ul style="list-style-type: none"> <li>• Leverage alternative energy sources and efficiency initiatives to reduce the Company's energy usage</li> </ul>
<b>Products and Services</b>	<ul style="list-style-type: none"> <li>• Leverage our existing infrastructure expertise to develop RNG production facilities</li> <li>• Explore leveraging existing infrastructure to transport alternative low-carbon and no-carbon fuel sources, such as RNG and hydrogen</li> <li>• Explore CCUS opportunities</li> </ul>
<b>Markets</b>	<ul style="list-style-type: none"> <li>• Access to markets seeking responsibly sourced natural gas production</li> </ul>
<b>Resilience</b>	<ul style="list-style-type: none"> <li>• Improved efficiencies for natural gas development and gathering operations within contiguous acreage position</li> </ul>



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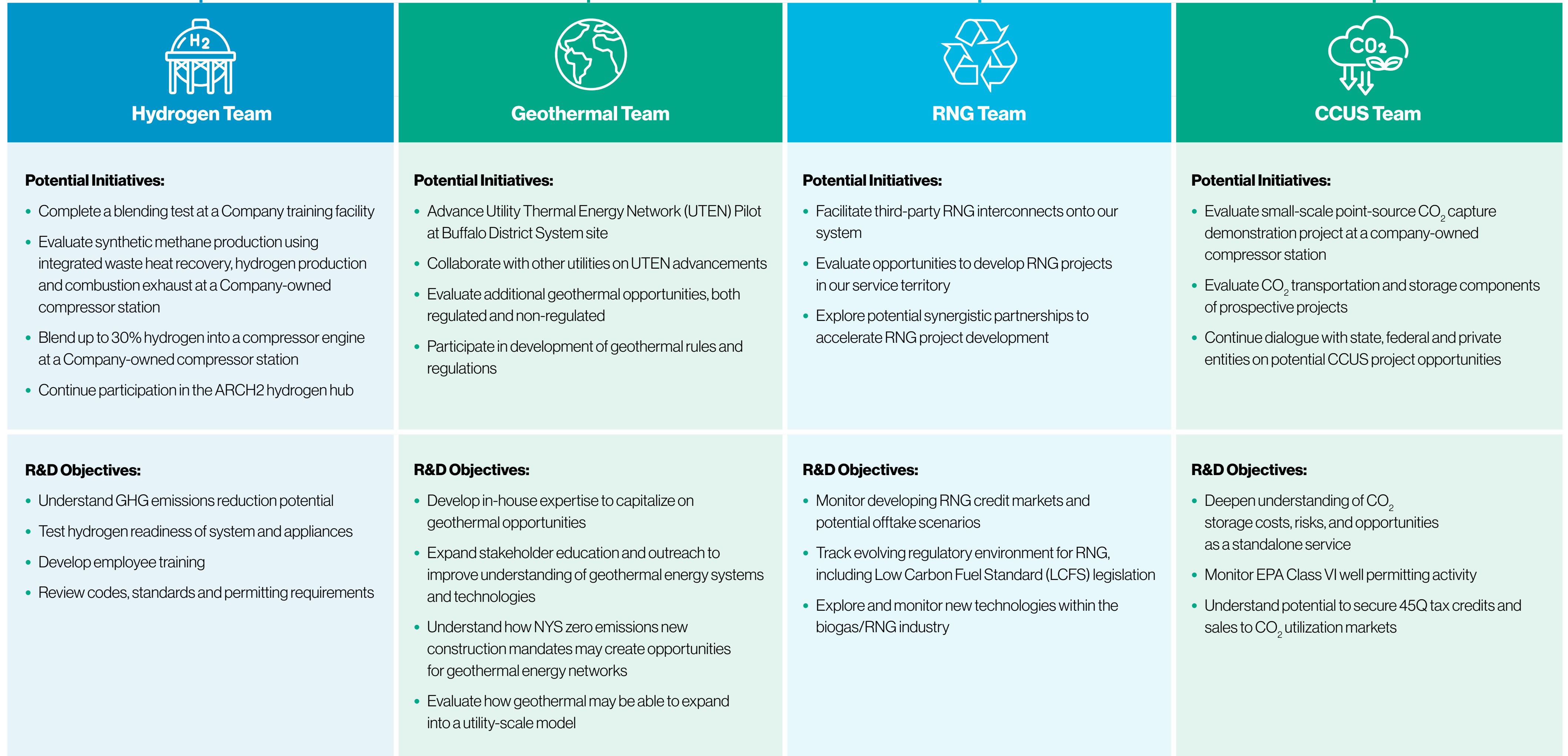
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# Energy Transition Steering Committee





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## Evaluating the Resilience of our Business to Climate Risk

### Physical Risk Analysis

Similar to transitional climate risks, the Company completed a review of future physical risks from climate driven hazards across Upstream, Midstream and Downstream assets in its portfolio, as detailed in the Company's [Climate Report](#). The Company conducted a physical risk assessment with two climate scenarios, in alignment with TCFD recommendations:

- Business-as-usual scenario:** Society follows a regional rivalry trend with competition among regions, low technological advancement and high challenges to both adaptations and mitigations. Global temperature increases are held below 4°C by 2100.
- Optimistic and attainable scenario:** The world follows a sustainable path with low challenges to mitigations or adaptations. Global temperature increases are held below 2°C by 2100.

The Company stress tested a representative sample of its critical assets to evaluate its exposure to climate physical risk by analyzing the 4°C scenario.

### Climate Hazards

Acute	Chronic
<ul style="list-style-type: none"> <li>Flooding</li> <li>Landslides</li> <li>Hurricanes</li> <li>Wildfires</li> </ul>	<ul style="list-style-type: none"> <li>Extreme Heat</li> <li>Extreme Cold</li> <li>Water Stress &amp; Drought</li> </ul>

To further understand the mid- and long-term physical risks, the Company reviewed the 30-year average risks under both scenarios at two time horizons: 2030 and 2050. Both acute hazards (hurricanes, riverine flooding, coastal flooding, wildfires, landslides, extreme rainfall) and chronic hazards (water stress, extreme heat and extreme cold) were evaluated under each scenario and at each time horizon. In accordance with TCFD recommendations, the analysis calculated the indicative financial risks due to direct damage or business interruptions from these future climate driven hazards. This comprehensive review of future physical risks from climate-driven hazards across critical assets within our Upstream, Midstream and Downstream segments indicated that there is relatively low financial risk from climate hazards in 2030 and 2050 to our facilities and operations. This is largely due to the location of our assets, coupled with the fact that the vast majority of our infrastructure is designed to withstand severe weather.

### Transitional Risk Analysis

In connection with the publication of the Company's 2022 [Climate Report](#), National Fuel retained ERM, an independent third party consultant, to conduct a climate scenario analysis across all segments of its business, including a lower than 2°C scenario ("Sustainable Development Scenario"). For the purposes of this analysis, National Fuel utilized future energy market scenarios developed by the International Energy Agency (IEA) to test

the resiliency of the Company's assets and operations against potential future climate-related transitional risks. Each scenario assumed a different set of policy changes, as well as market trends (demand), energy efficiencies and technology advancements.

### Downstream Segment's Long-Term Plan and Scenario Analysis

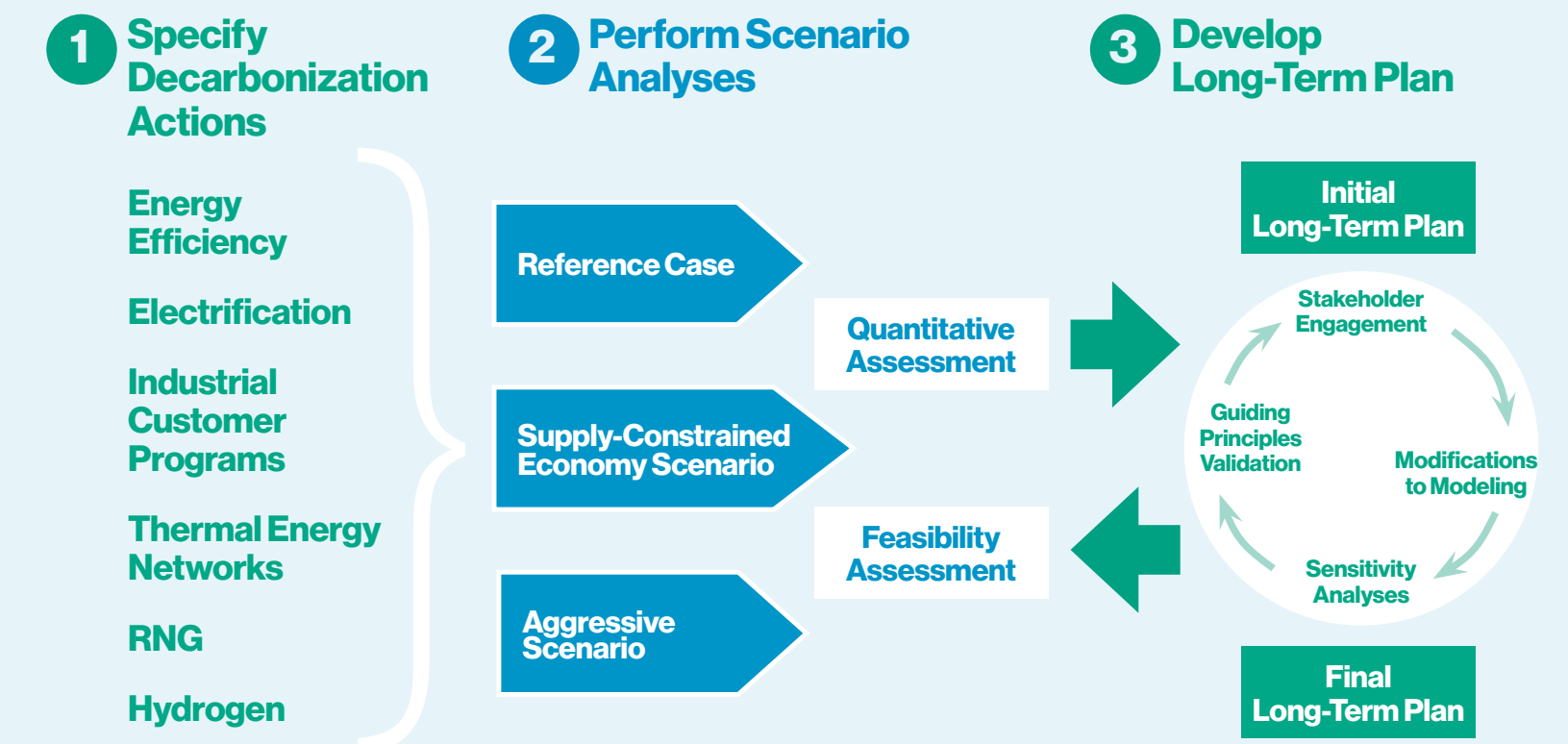
In July 2023, Distribution submitted its final Long-Term Plan (LTP) for its New York service territory in accordance with the NYPSC's Gas System Planning Proceeding. In December 2023, the NYPSC issued an order implementing the LTP with modifications. The LTP demonstrates the Company's commitment to pursuing responsible GHG emissions reductions, enhancing the resilience of the energy system and delivering safe, reliable and affordable energy service to customers.

Taken together, the decarbonization actions in Distribution Corporation's LTP have the potential to make substantial contributions towards New York's decarbonization goals. As drafted, the LTP is projected to reduce emissions by 40% by the end of a 20-year horizon (2042) compared to the Reference Case (business-as-usual) levels, and by 53% from 1990 levels. The emissions reductions start modestly and increase over time as constraints on deploying technology are resolved. Emissions reductions are expected to continue after 2042, through 2050 and beyond.



## Development of Utility's LTP

Distribution Corporation developed the Long-Term Plan by using a reference case and analyzing two scenarios to better understand relative efficiencies (cost per ton of GHG emissions reductions) and identify a combination of decarbonization actions towards New York's Climate Act goals that produces the best overall plan to optimize affordability, reliability and respective emissions reductions. Both scenarios included specific levels of each of the six decarbonization actions but were not limited by cost.





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**Sensitivity of Reserve Levels to Scenarios that Account for a Price on Carbon Emissions**

Seneca reviewed sensitivities to its reported fiscal 2023 year-end reserves utilizing crude oil and U.S. natural gas pricing for three different scenarios outlined in the 2023 World Energy Outlook (“WEO”) Report – the Announced Pledges, Stated Policies and Net-Zero by 2050 scenarios. The WEO Announced Pledges Scenario reflects all of the current global climate policy commitments and targets, assuming these goals are met in full within the intended target timeline. The WEO Stated Policies

Scenario reflects what governments are doing to achieve stated targets and objectives they have set out rather than what they say they will achieve. The new WEO Net Zero by 2050 Scenario examines a pathway to net zero emissions for the global energy sector consistent with minimizing global temperature rise to 1.5 °C.

For purposes of Seneca’s review, Seneca reviewed the impact of the oil and natural gas prices included in the WEO Report commodity pricing table on its fiscal 2023 reported reserves. All associated operating costs and

capital inputs assumed in calculating Seneca’s SEC-reported reserves were held constant for the WEO scenarios.

Based on the above assumptions, Seneca calculated net fiscal year 2023 reserves for the three WEO Report policy scenarios. With respect to Seneca overall, the pricing shown in each of the WEO Report Scenarios would not be expected to have a material negative impact on Seneca’s reported fiscal 2023 reserves, due to the low operating costs and high percentage of reserves produced early in the lifecycle of our wells.

**Prices by Scenario (source WEO 2023)**

Real Terms (USD 2020)	2010	2022	Stated Policies		Announced Pledges		Net Zero Emissions by 2050	
			2030	2050	2030	2050	2030	2050
IEA Crude Oil (USD/barrel)	103	98	85	83	74	60	42	25
<b>Natural Gas (USD/MBtu)</b>								
United States	5.8	5.1	4.0	4.3	3.2	2.2	2.4	2.0

Net reserves would remain at approximately 4.5 TCFE under all three of the WEO Report scenarios.





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## Climate-Related Metrics and Targets

In connection with the Company's ongoing sustainability efforts, the Company evaluated key metrics and developed targets to measure and monitor its progress in managing GHG and methane emissions. National Fuel has established targets on a consolidated basis and at the segment level: a corporate-level Scope 1 & 2 GHG emissions reduction target (2020 baseline), and segment-level Scope 1 & 2 methane emissions intensity targets (2020 baselines). Additionally, the Utility Segment set Scope 1 reduction targets for delivery system emissions (1990 baseline). Through the risk management process, the Company identified these metrics as the most useful in managing climate-related risks and established corresponding targets to further our emissions reduction strategy:

- Methane Intensity Reduction Targets at each of our businesses
- GHG Emissions Reduction Target for the consolidated Company
- Utility Delivery System GHG Emissions Targets
  - 75% reduction by 2030
  - 90% reduction by 2050

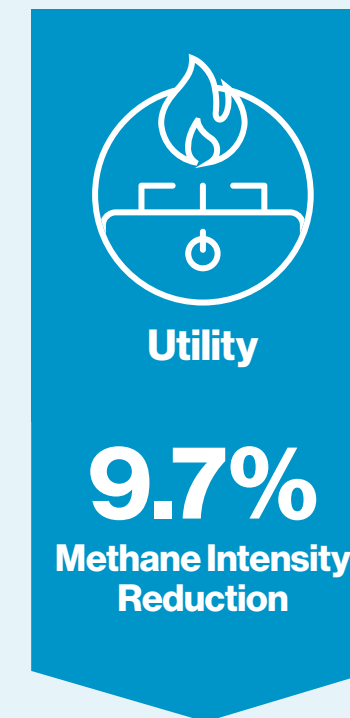
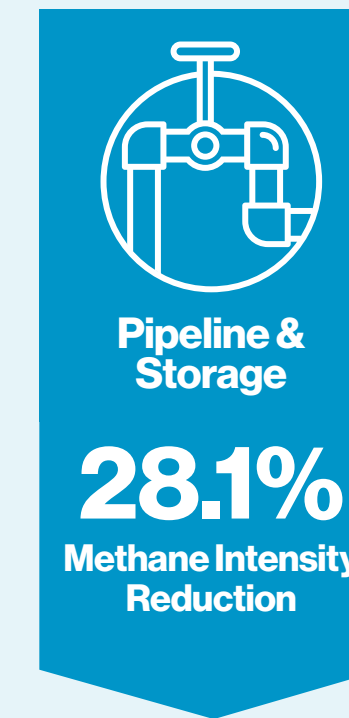
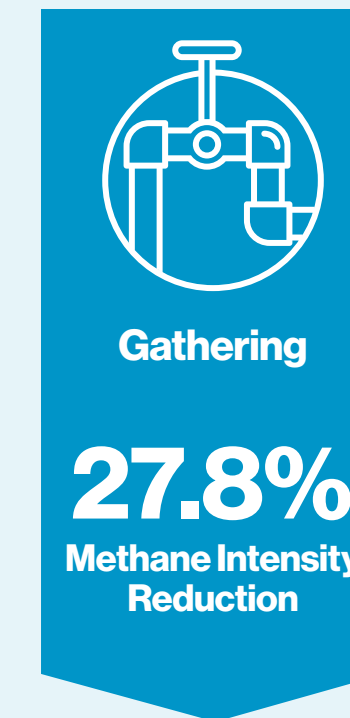
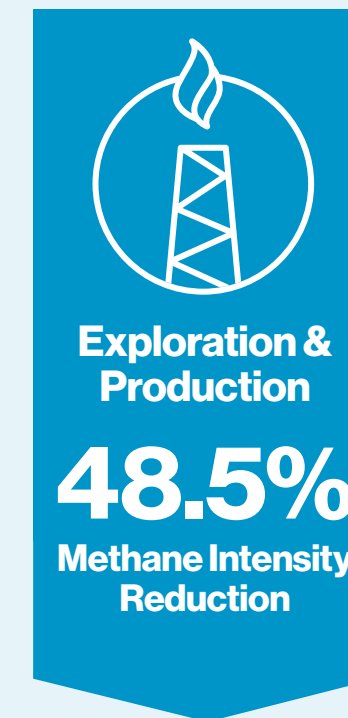
The Company has made significant progress against its various methane intensity targets since 2020 driven by emissions mitigation projects, successful implementation of best management practices (BMPs) and continued system modernization. Given recent EPA

regulatory changes in emissions reporting - including updated factors for some existing sources, the Company expects that in future reporting years our calculations associated with the assigned baseline year and progress towards these targets may change<sup>1</sup>. More information pertaining to the Company's programs that are driving our progress to limit GHG emissions can be found in the [Environmental – Greenhouse Gas Emissions](#) disclosure.

At the corporate level, the Company's goal is to reduce GHG emissions 25% by 2030. We have made progress toward our consolidated GHG emissions reduction target, with a 5.6% total GHG emissions reduction, despite the significant growth of our Midstream Segment pipeline businesses in recent years, and an increase in our natural gas production.<sup>2</sup> In future years, we plan to build on our emission reduction efforts through continued system modernization and implementation of available technologies, as well as evaluation of pilot projects as new technologies become commercially available. Additionally, the Company has reduced its total consolidated methane emissions 17.1% since 2020. Our continued focus on constructing efficient and low-carbon intensity facilities and systems, while also improving emissions reductions of our existing operations, has allowed the Company to reduce methane emissions and limit total GHG emissions while meaningfully growing our business.

## Progress as of 2023

Reduction Since 2020



2030 Target



<sup>1</sup> The updated EPA GHGRP rules also included addition of new emissions sources, some of which the Company has already included in its emissions reporting in previous years.  
<sup>2</sup> Consolidated GHG emissions reduction goal does not include Highland Field Services, LLC.



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# Embracing Environmental Stewardship

Across our organization, National Fuel remains driven by our guiding principle of Environmental Stewardship. This includes focusing our efforts on reducing our emissions, minimizing our impacts on biodiversity, prioritizing restoration and creating robust waste management practices.

**Natural gas will continue to play a critical role in the energy ecosystem** as we work toward a lower-emissions future. National Fuel takes significant steps to reduce our emissions through further system modernization, best management practices and embracing new and emerging technologies.

## Committed to Reducing Our Emissions

- ✓ **Segment Level Methane Intensity Reduction Targets**
- ✓ **Consolidated Greenhouse Gas Reduction Target**
- ✓ **Continued Downstream and Midstream Segment System Modernization**
- ✓ **Seneca and Midstream Company Responsible Gas Certifications**
- ✓ **Fleet Vehicle Idle Tracking Program**
- ✓ **Natural Gas Pneumatic Device Conversions**
- ✓ **No Routine Flaring<sup>1</sup>**
- ✓ **Minimizing Pipeline Blowdowns and Operational Venting**
- ✓ **Piloting Technologies Focused on Emissions Reduction**
- ✓ **Executive Compensation tied to Emissions Reduction Efforts**

<sup>1</sup> The World Bank defines routine flaring as flaring during normal production operations in the absence of sufficient facilities or amenable geology to reinject the produced gas, utilize it on-site or dispatch it to a market.



# Supporting Environmental Stewardship

Our **Environmental Policy Statement** reinforces the Company's commitment to integrate environmental protections across all segment operations.

**Equitable Origin Certifications** achieved for Seneca and Midstream Company assets reflect the Company's commitment to responsibly operating its assets.

**MiQ Methane Emissions Performance Certification** achieved at Seneca demonstrates its responsible natural gas production focused on abating methane emissions and monitoring technology deployments.

**Biodiversity Enhancement and Wildlife Conservation** efforts reflect our focus on creating and improving habitats through restoration efforts and minimizing impacts to ecologically sensitive areas.

**Upstream Water Management** focuses on responsibly managing water assets used in operations through water quality assessments, containment best practices and recycling over 90% of Seneca's produced fluids.

**Corporate Waste Management Programs** reflect comprehensive plans to ensure the proper management, storage, handling and disposal of waste.



# Greenhouse Gas Emissions

For more than 120 years, National Fuel and its employees have been committed to operating safely and responsibly in the local communities. We understand the vital role we play in upholding standards of environmental protection across all areas of our operations. In 2018, each of National Fuel's subsidiaries made independent emissions reduction commitments under the EPA's Methane Challenge Program by entering into partner agreements with the EPA. Building on those commitments, in 2021, each of our business segments announced methane emissions intensity targets. Since that time, our ongoing sustainability initiatives have driven our significant progress towards achieving those targets.

## Progress towards 2030 Emissions Reduction Targets and Ongoing Initiatives

	2030 Emissions Reduction Targets	Progress Against 2020 Baseline	Ongoing Sustainability Initiatives
<b>Exploration &amp; Production</b>	<b>40% Reduction in Methane Intensity</b>	48.5% Reduction	<ul style="list-style-type: none"> <li>Responsible gas certifications</li> <li>Pneumatic device conversions</li> <li>Operational BMPs for well liquids unloading and flowback</li> </ul>
<b>Gathering</b>	<b>30% Reduction in Methane Intensity</b>	27.8% Reduction	<ul style="list-style-type: none"> <li>Natural gas pump and pneumatic device conversions</li> <li>Engine upgrades for improved combustion emissions</li> </ul>
<b>Pipeline &amp; Storage</b>	<b>50% Reduction in Methane Intensity</b>	28.1% Reduction	<ul style="list-style-type: none"> <li>Installation of recovery systems to capture and minimize venting from blowdowns and compressor seals</li> <li>Natural gas pump and pneumatic device conversions</li> <li>Replacement and/or repair of isolation/vent valves</li> <li>Engine upgrades focused on combustion emissions</li> </ul>
<b>Utility</b>	<b>30% Reduction in Methane Intensity</b>	9.7% Reduction	<ul style="list-style-type: none"> <li>Investment in system modernization – primarily replacement of mains and services</li> <li>Advancing RNG in service territories</li> <li>Hydrogen blending demonstration projects</li> <li>Reducing leak backlog</li> </ul>
<b>Consolidated Corporate Goal</b>	<b>25% Reduction in GHG Emissions</b>	5.6% Consolidated GHG Reduction	<ul style="list-style-type: none"> <li>Driven by initiatives listed above</li> </ul>

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## Consolidated Greenhouse Gas and Methane Emissions

The Company continues to measure and monitor its progress in managing greenhouse gas and methane emissions. Additional historical emissions information, as well as emissions information broken down by subsidiary, is provided in the appendices.


Scope 1 Greenhouse Gas Emissions (Metric Tons CO <sub>2</sub> e) <sup>1</sup>		2023
<b>Total Downstream Segment</b>	EPA Mandatory Reporting <sup>2</sup>	232,258
	Additional EPA Sources <sup>3</sup>	973
	Other Sources <sup>4</sup>	94,416
<b>Total Downstream Segment</b>		<b>327,647</b>
<b>Total Midstream Segment</b>	EPA Mandatory Reporting <sup>5</sup>	889,400
	Additional EPA Sources <sup>6</sup>	147,775
	Other Sources <sup>7</sup>	20,106
<b>Total Midstream Segment</b>		<b>1,057,281</b>
<b>Total Upstream Segment</b>	EPA Mandatory Reporting <sup>8</sup>	186,710
	Other Sources <sup>9</sup>	18,409
<b>Total Upstream Segment<sup>10</sup></b>		<b>205,119</b>


Scope 1 Methane Emissions (Metric Tons CH <sub>4</sub> as CO <sub>2</sub> e)		2023
<b>Total Downstream Segment</b>	EPA Mandatory Reporting <sup>2</sup>	231,961
	Additional EPA Sources <sup>3</sup>	973
	Other Sources <sup>4</sup>	85,610
<b>Total Downstream Segment</b>		<b>318,544</b>
<b>Total Midstream Segment</b>	EPA Mandatory Reporting <sup>5</sup>	237,467
	Additional EPA Sources <sup>6</sup>	105,385
	Other Sources <sup>7</sup>	16,982
<b>Total Midstream Segment</b>		<b>359,834</b>
<b>Total Upstream Segment</b>	EPA Mandatory Reporting <sup>8</sup>	99,034
	Other Sources <sup>9</sup>	396
<b>Total Upstream Segment<sup>10</sup></b>		<b>99,429</b>

Scope 2 Greenhouse Gas Emissions (Metric Tons CO <sub>2</sub> e) <sup>11</sup>	2023
<b>Total Downstream Segment</b>	949
<b>Total Midstream Segment</b>	5,401
<b>Total Upstream Segment<sup>10</sup></b>	546

1 CO<sub>2</sub>e values calculated in accordance with the published 100-year time horizon global warming potential (GWP) values from the IPCC Fifth Assessment Report (AR5, 2014) as preferred by SASB.  
 2 Emissions subject to the Greenhouse Gas Mandatory Reporting program (40 CFR Part 98, Subpart W) include mains, services, M&R stations, and large combustion units in the natural gas distribution segment (LDCs).  
 3 Includes emissions from: 1) Distribution Corporation – owned transmission pipeline and gathering segments that are subject to Subpart W, but do not meet the reporting threshold, 2) blowdown emissions from the transmission pipeline segment, and 3) in the gathering segment, emissions from blowdowns, dehydrator vents and equipment leaks.  
 4 Includes emissions from sources not subject to EPA reporting. Sources include customer meters, pressure relief valves, blowdowns (LDC), dig-ins, pipeline leaks (transmission), small combustion units, fleet and natural gas space heating.  
 5 Facilities with actual GHG emissions greater than 25,000 metric tons of CO<sub>2</sub>e (i.e., GHGRP reporting threshold) are subject to EPA monitoring and reporting of GHG emissions.  
 6 EPA Part 98 sources that do not reach minimum threshold to mandate annual reporting.  
 7 Other sources included by NGSi and ONE Future, along with fleet and office buildings.  
 8 Emissions as reported under EPA GHG Reporting Rule Subpart W, with the exception of the source category "Well Venting for Liquids Unloading," which utilized the Pennsylvania Unconventional Natural Gas Emission Inventory.  
 9 Other Sources include sources identified under NGSi, fleet, office and small sources that do not meet EPA Subpart W Reporting requirements.  
 10 Upstream data does not include Highland Field Services. Emissions information for Highland Field Services is provided in the appendix.  
 11 Scope 2 represents emissions associated with purchased electricity. In 2023, EPA released 2021 eGRID factors that were utilized in the 2023 calculation for purchased electricity.

Since 2020, the Company has reduced consolidated emissions, all while increasing production and throughput.

 Total consolidated Methane Emissions 17.1%

 Total consolidated GHG Emissions 5.6%



Solar powered air compression system that replaced natural gas pneumatics at a Seneca well pad



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## Drivers of Emissions Reduction Efforts

National Fuel is committed to reducing greenhouse gases and methane emissions. We continue to employ best-in-class emissions practices to reduce the emissions intensity of our operations, including improved operational practices, technological enhancements and data collection.

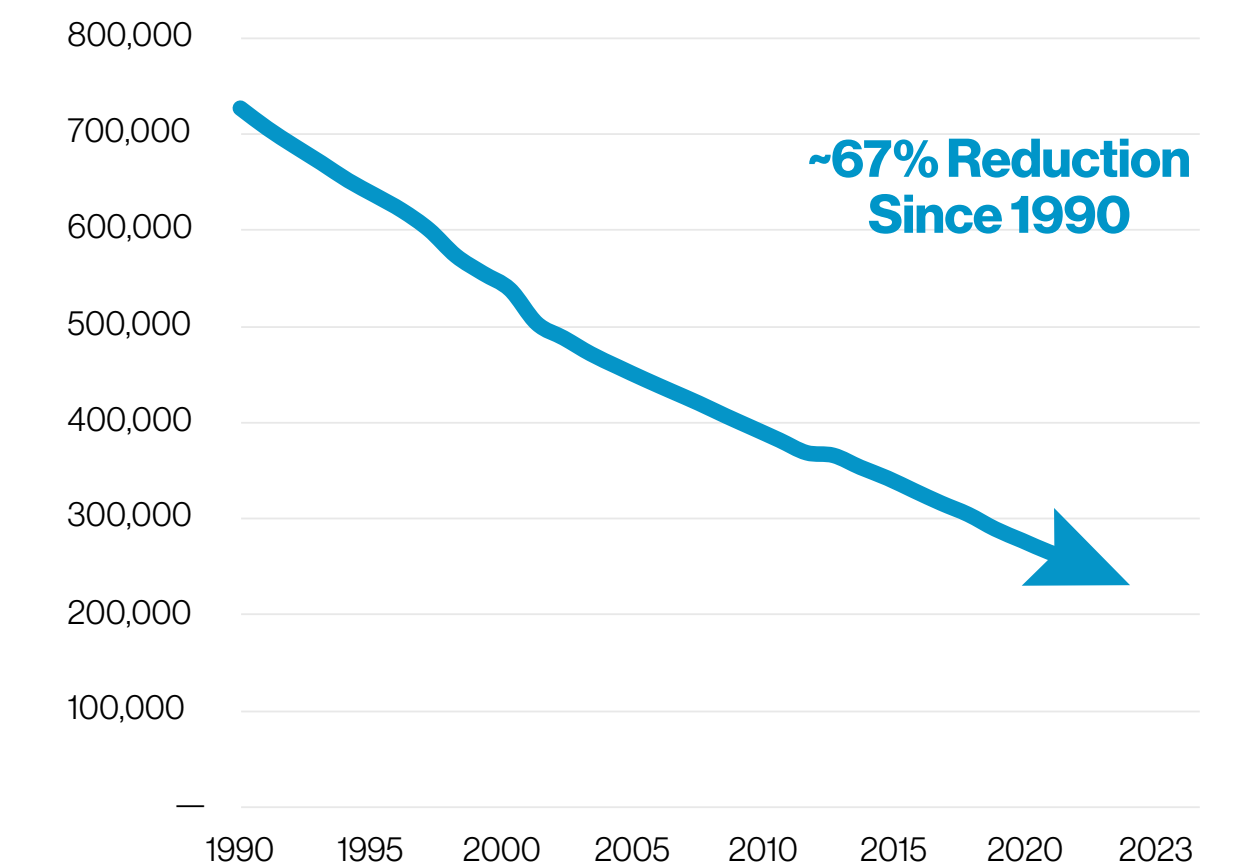
Emissions Reducing Operational Practices Across Segments	
<b>Minimizing Pipeline Blowdowns</b> (Downstream and Midstream Segments)	Leveraging maintenance schedules and implementing improved operational practices.
<b>Fugitive Emissions Monitoring</b> (All Segments)	Implemented regular fugitive emissions inspections utilizing an array of approaches including audible, visual, olfactory (AVO) techniques, optical gas imaging (OGI) equipment, continuous emissions monitoring (CEM) devices and aerial flyover technologies for the detection and mitigation of fugitive emissions.
<b>Vent Gas Recovery Systems</b> (Midstream Segment)	Installation and/or temporary use of Vent Gas Recovery (VGR) systems to capture gas that would have been previously vented to atmosphere.
<b>Natural Gas Pneumatic Device and Pump Conversion/ Replacement</b> (Midstream and Upstream Segments)	Conversion of natural gas driven pneumatic devices and pumps to utilize compressed air/electric/nitrogen systems and the installation and utilization of natural gas capture devices that recycle vented gas for beneficial reuse.
<b>Well Emission Mitigation</b> (Upstream Segment)	As new wells are brought into production (flowback phase), process changes and the immediate use of a separator have been implemented to eliminate venting methane to atmosphere. Pressure builds and the deployment of mobile compressor units have been utilized to mitigate venting during well liquids unloading.
<b>Compression Operations Minimization of Venting</b> (Midstream Segment)	Development and implementation of best management practices to reduce venting.
<b>Control Systems and Operating Techniques</b> (Midstream Segment)	Modern station and unit controls are incorporated into compressor facilities resulting in less unit starts/stops at select facilities, and therefore less compressor unit blowdowns.
<b>System Modernization</b> (Downstream and Midstream Segments)	Investments in system modernization, including continued replacement of older vintage mains and services, reduces leaks while maximizing safety and reliability.

## System Modernization Drives Progress Toward Utility GHG Emissions Reduction Targets

In 2021, the Utility Segment set GHG emissions reduction targets of 75% by 2030, and 90% by 2050, from 1990 levels for its distribution system, driven by its ongoing system modernization efforts, including continued replacement of older vintage mains and services.<sup>1</sup> Our 2023 accomplishments include:

- Replacing or retiring cast/wrought iron and non-cathodically protected steel mains at an average rate of 6.2% per year for the period of 2019 to 2023.
- Reducing inventory of non-cathodically protected steel mains by 7.0% and cast/wrought iron mains by 7.7%. The overall reduction of these facilities was 7.1% in 2023.
- Removing the last known piece of cast iron pipeline from operation in 2023.

**Utility Segment Mains & Services GHG Emissions (MT CO<sub>2</sub>e)**



<sup>1</sup> Baseline emissions and emissions reduction target for Scope 1 emissions are calculated pursuant to the reporting methodology as of 2023 under the U.S. EPA's GHG Reporting Program (Subpart W), primarily Distribution pipeline mains and services. Revisions of Subpart W emissions factors may change the reported and expected progress against these targets.



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**Technology and Data Collection**

The Company evaluates and pilots various technologies to determine the most sustainable capital efficient emissions reduction methods. Emissions data is collected and analyzed to develop a comprehensive understanding of emissions sources, strategies for mitigation and project costs.

<b>Downstream Segment</b>	<ul style="list-style-type: none"> <li>Accelerated leak surveys guided by new software that targets facilities with a higher potential to leak.</li> <li>Program that digitally tracks time vehicles spend (in hours) idling to provide data and encourage employees to decrease fleet idling time while in the field.</li> </ul>
<b>Midstream Segment</b>	<ul style="list-style-type: none"> <li>Conversion of natural gas pneumatic devices and/or pumps to utilize air/electric systems.</li> <li>Commenced VGR projects to capture and recover natural gas from centrifugal compressor dry gas seals, compressor rod packing and planned pipeline and compressor blowdown events.</li> <li>Working with original equipment manufacturers to upgrade engines to reduce methane emissions from combustion.</li> <li>Mitigating fugitive methane emissions at transmission and storage compressor stations by targeting specific leak sources such as compressor unit isolation and blowdown valve leakage.</li> </ul>
<b>Upstream Segment</b>	<ul style="list-style-type: none"> <li>Joined the Appalachian Methane Initiative (AMI). This coalition is comprised of U.S. natural gas companies and aims to utilize aerial monitoring technologies to detect and quantify methane emissions across the Appalachian basin.</li> <li>Implemented GHG emissions management software to assist in ongoing calculations, forecasting, benchmarking, reporting and visualization of the upstream emissions profile.</li> <li>Transitioned three well pads to solar powered pneumatics, which are zero emissions pads during optimal conditions and allow Seneca to expand its knowledge of how solar power may be utilized in future applications.</li> </ul>

**Leveraging Partnerships**

National Fuel proudly partners with non-profit organizations and industry trade partners to improve our environmental awareness and commitment to protecting the environment. We utilize expertise and resources from each partner or coalition to further develop our understanding of available technologies, industry best practices and challenges that lie ahead.

	Coalition of natural gas companies spanning the value chain that are working to voluntarily reduce methane emissions through shared best practices and technologies.
	Coalition of upstream and midstream peers working to enhance methane monitoring and emissions reductions throughout the Appalachian Basin.
	Trade association that identifies and addresses critical matters related to the development, construction, operation and maintenance of natural gas infrastructure value chain through engagement, outreach and research through the INGAA Foundation.
	Committed to implementing best practices to minimize emissions associated with liquids unloading, LDAR surveys and replacing/removing/retrofitting high-bleed pneumatic controllers.
	Coalition of upstream and midstream companies working to address issues regarding the production of job-creating American natural gas from the Marcellus and Utica shale plays.
	Trade association focused on the policies that aim to result in the safe, responsible exploration and production of America's oil and natural gas resources.
	Trade association representing utilities that promotes innovation, infrastructure modernization and advanced technologies to reduce greenhouse gas emissions while maintaining safe, reliable, resilient and affordable energy service.



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## Responsibly Sourced Gas Designations

Seneca and Midstream Company have achieved responsibly sourced gas designations to differentiate our production and gathering operations and to provide independent, credible verification of our corporate responsibility related policies, procedures and practices.



### Equitable Origin Certifications

Equitable Origin is a comprehensive standard for assessing social and environmental performance during energy development. The standard covers a wide range of human rights, social, environmental and governance practices and requires an independent audit by an approved assessor. In 2023, Seneca successfully completed the annual re-verification process for certification of 100% of its production under Equitable Origin's EO100™ Standard for Responsible Energy Development. Seneca attained a peer leading "A" certification grade in 2023, indicating outstanding performance across all aspects of the standard including:

- Corporate Governance, Transparency and Ethics;
- Human Rights, Social Impact and Community Development;
- Indigenous People's Rights;
- Fair Labor and Working Conditions; and
- Climate Change, Biodiversity and Environment.



### MiQ Methane Emissions Performance Certification

MiQ is a methane performance standard requiring leading performance in criteria including methane intensity, company practices to reduce emissions and monitoring technology

In August 2022, and again in August 2023, Seneca achieved certification of 100% of its natural gas production under the MiQ Standard for Methane Emissions Performance at the highest certification level, an "A" grade. The MiQ Standard is an independent framework for assessing methane emissions and practices for oil and natural gas facilities. The standard serves as a credible way to differentiate natural gas production based on methane emissions, company practices to abate emissions and monitoring technology deployment.



**“Midstream is proud to set this industry milestone, as the first gathering operator to earn EO100™ certification, which reaffirms our commitment to implement best practices related to corporate responsibility and sustainability throughout our operations. We see this achievement as a step forward in our efforts to promote sustainability across our assets, transporting responsibly sourced energy to interconnections with pipelines that serve key commercial markets and end users.”**

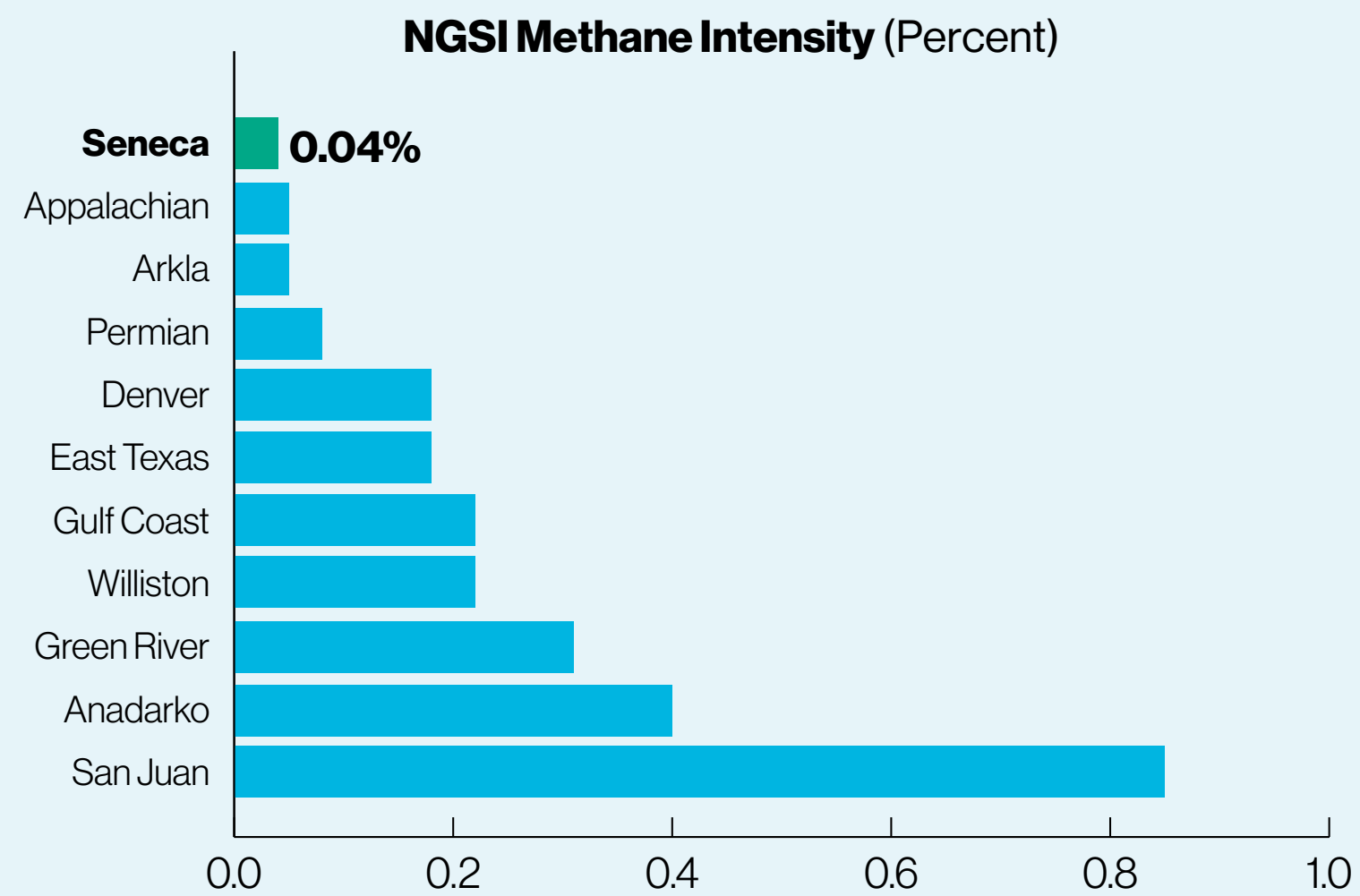
**– Justin Loweth, President of National Fuel Gas Midstream Company, LLC**

In September 2023, Midstream Company achieved certification of 100% of its natural gas gathering system assets under Equitable Origin's EO100™ Standard for Responsible Energy Development. Midstream was the first gathering or midstream company to certify all its assets, demonstrating leadership in the field and commitment to responsible energy development.



## Methane Intensity of Appalachia vs. Other Top U.S. Production Basins<sup>1</sup>

Seneca operates in the Appalachian basin, which boasts the lowest methane intensity among the top U.S. production basins. Seneca's NGSi Methane Intensity is below the basin average, demonstrating the success of our emission reduction efforts.



## Flared Hydrocarbons, Other Combustion, Process Emissions, Other Vented Emissions and Fugitive Emissions<sup>2</sup>

### Midstream Segment

For our Midstream Segment, the largest contribution to CO<sub>2</sub>e emissions is from combustion sources, primarily carbon dioxide from compressor engines. Our Midstream Segment utilizes various mitigation strategies to minimize those emissions. To mitigate emissions from combustion sources, the Company is focused on engine upgrades, where feasible, with improved combustion technologies. We are continuing to evaluate the environmental benefits and the technical and economic feasibility of multiple technologies for consideration in the future. Moreover, we are exploring the impacts of hydrogen fuel blending as it relates to engine performance and exhaust stack emissions.

The next largest source categories contributing to overall GHG emissions are fugitive sources (including component leaks, compressor seal/rod packing venting and compressor unit isolation and blowdown valve leakage) and vented sources (which would include, among other things, pneumatic devices and blowdowns). The Midstream Segment is

focused on converting and replacing natural pneumatic devices with air systems. In 2023, the Company commenced and completed a number of VGR projects to capture and recover natural gas from dry gas seals, compressor rod packing and planned compressor blowdown events.

### Scope 1 Greenhouse Gas Emissions by Source Category (Metric Tons CO<sub>2</sub>e)

Source Category	2023
Combustion Sources	694,138
Fugitive Emissions	168,871
Vented Emissions	136,561
Process Emissions	46,098
Flared Hydrocarbons	11,612
<b>Total Midstream Segment</b>	<b>1,057,280</b>

### Upstream Segment

Seneca continues to look for opportunities to reduce emissions through the implementation of best management practices, technology and enhanced methane detection protocols.

- Seneca has made significant progress in reducing vented emissions. In 2023, Seneca eliminated vented methane emissions during flowback from all wells that were brought online. Additionally, new operational best management practices were implemented across our assets for well liquids unloading to reduce vented emissions.

We anticipate further reductions in 2024 with the addition of well liquid unloading compressors, another tool that can be utilized to mitigate vented emissions.

- Periodic aerial flyovers of all assets were performed, contributing to a 39% reduction in reported fugitive emissions.
- Seneca continues to prioritize the replacement of natural gas pneumatic devices and succeeded in converting more than 50% of total devices through the end of 2023.

### Scope 1 Greenhouse Gas Emissions by Source Category (Metric Tons CO<sub>2</sub>e)

Source Category	2023
Combustion Sources	104,442
Vented Emissions	96,543
Process Emissions	1,928
Fugitive Emissions	1,813
Flared Hydrocarbons <sup>3</sup>	393
<b>Total Upstream Segment</b>	<b>205,119</b>

<sup>1</sup> Benchmarking Methane and other GHG Emissions of Oil and Natural Gas Production in the United States – June 2024. Available at Benchmarking Methane and other GHG Emissions of Oil and Natural Gas Production in the United States – Clean Air Task Force (catf.us).

<sup>2</sup> Disclosures surrounding flared hydrocarbons and source emissions categories are not SASB metrics for utilities, which is why the Downstream Segment is not represented.  
<sup>3</sup> To mitigate vented emissions, Seneca has utilized a temporary non-routine flare to combust methane rather than vent. The emissions associated with this form of controlling vented methane is accounted for under the Flare category.



# Air Quality

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National Fuel has a robust air quality control, management and improvement program, with dedicated resources available to ensure that controls are in place and monitored. As part of our air quality compliance program, we are required to calculate and report emissions from stationary and fugitive emissions sources at operating facilities that meet specified reporting criteria, which varies by state.

## Air Quality Practices<sup>1</sup>

### Midstream Segment

Emissions are calculated using the best available data in accordance with agency guidelines and accepted methods, which include, but are not limited to:

- Records of source operating hours, fuel consumption and other key operating parameters (e.g., throughput, temperature and pressure, etc.);
- Site-specific analyses, periodic monitoring and stack test results;
- Emissions modeling software (e.g., GRI-GLYCalc, TankESP, ProMax, etc.);
- Published emission factors (e.g., Manufacturer, AP-42, 40 CFR 98 Subpart W); and
- Records of leaks discovered and leak duration.

This includes all Midstream Segment compressor stations, Pennsylvania defined wellsite locations and other select facilities with stationary sources (e.g., interconnects with engines or dehydration units) in Pennsylvania and New York. Emissions from fleet vehicles are also included.

### Upstream Segment

Seneca is engaged in the developing emissions monitoring, measurement, reconciliation and verification (MMRV) landscape. In doing so, the Upstream Segment has piloted numerous aerial flyover technologies and compared these aerial measurements to our annual emissions inventory, direct source-level measurements, and on-site continuous emissions monitors. In addition to Seneca's internal reconciliation review and process, in 2023 Seneca piloted the GTI Veritas Protocol with the Veritas team to better understand the process and what an MMRV framework may consist of. Given

the different measurement technologies and detection results, the pilot identified it is necessary to have a thorough understanding of operations, associated equipment and the need for a measured versus calculated method to characterize emissions for some source categories. Seneca recognizes that MMRV frameworks are still a developing space and will continue to collaborate with other operators and researchers to further enhance the frameworks.

In addition to GHG emissions, Seneca also monitors criteria pollutants through operations and maintenance records, fuel usage and regular stack monitoring of compressor engines to ensure that exhaust emissions are within state regulatory thresholds. Fuel elimination and substitution methods are reviewed to determine ways to meet operational demand while minimizing emissions impacts.



## Efforts to Reduce Criteria Pollutants

### Midstream and Upstream Segments

**Fuel Optimization:** Combustion sources are reviewed and methods to eliminate, reduce or substitute fuels to a lower emission option, such as diesel substitution to natural gas, as well as the transition to electrical or solar system, are identified.

**Engine Performance Monitoring and Testing:** Certain compressor engines are emission monitored (either on a defined interval basis or based on utilization) and tested by a third-party approved stack testing company to ensure emissions performance. This performance testing monitors certain pollutants in the engine's exhaust to ensure it is meeting engine performance specifications and permit requirements.

Where possible, Seneca has used Tier 4 engines instead of Tier 2 engines if the site requires diesel power. Tier 4 engines have much stricter emissions controls which reduce PM<sub>10</sub> and NO<sub>x</sub> emissions.

**Engine Replacements and/or upgrades (Midstream Segment Only):** Existing internal combustion engines are being replaced with lower emissions models or modified to reduce emissions.

**System Modernization (Midstream Segment Only):** Periodic evaluation of system to remove and/or retire older assets with minimal low-emission technology.

### Criteria Pollutants (Metric Tons)

		2023
<b>Midstream Segment</b>	NO <sub>x</sub>	717
	SO <sub>x</sub>	10
	VOC	306
	PM <sub>10</sub>	31

### Criteria Pollutants (Metric Tons)

		2023
<b>Upstream Segment<sup>2</sup></b>	NO <sub>x</sub>	313
	SO <sub>x</sub>	1
	VOC	54
	PM <sub>10</sub>	12

<sup>1</sup> Qualitative disclosure surrounding air quality practices and quantitative disclosure for criteria pollutants are not SASB metrics for utilities, which is why the Downstream Segment is not represented within this section.  
<sup>2</sup> Upstream Segment data does not include Highland Field Services. Criteria pollutant emissions for Highland Field Services provided in the appendix.





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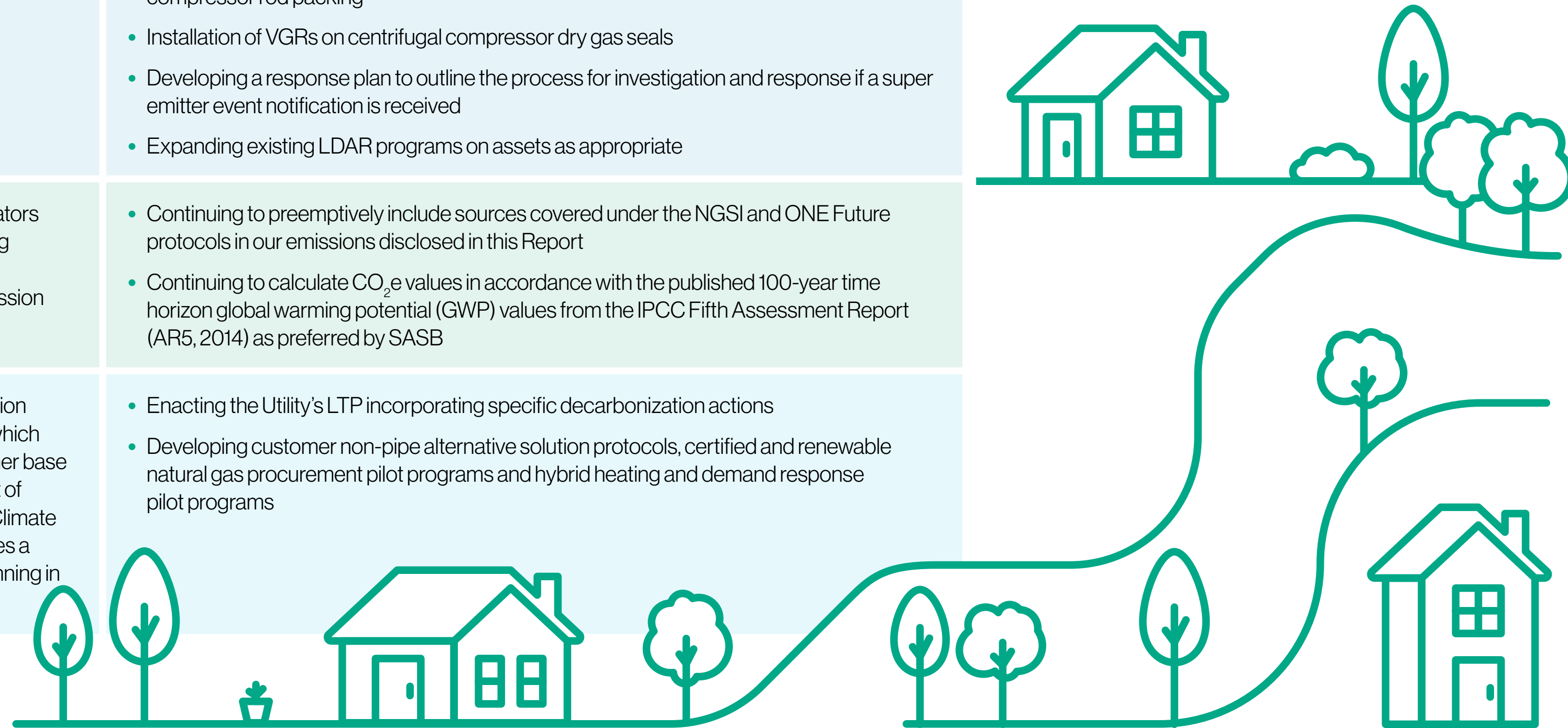
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# Managing the Evolving Regulatory Environment

The Company regularly reviews and evaluates the impacts that proposed and enacted legislative and regulatory changes and trends may have on our business segments. The Company's proactive approach to emissions reductions has positioned the Company well to comply with newly enacted and updated EPA regulations focused on greenhouse gas and methane emissions.

	Federal and State Enacted Legislation and Regulations Focused on Emissions	Company Initiatives to Address Emissions-Focused Rules
EPA Methane Rule	Applies to the Company's Midstream and Upstream Segments. New, modified and reconstructed facilities will be required, among other things, to establish monitoring and emissions standards, increase leak detection and repair requirements and replace certain equipment. States are required to enact similar provisions for existing facilities within the next five years.	<ul style="list-style-type: none"> <li>• Installing vapor destruction units for the capture and destruction of methane emissions from produced water tanks</li> <li>• Conversion of natural gas pneumatics and pumps</li> <li>• Implementing best management practice to reduce venting from well liquid unloading</li> <li>• Evaluation and potential expansion of existing monitoring and replacement program for compressor rod packing</li> <li>• Installation of VGRs on centrifugal compressor dry gas seals</li> <li>• Developing a response plan to outline the process for investigation and response if a super emitter event notification is received</li> <li>• Expanding existing LDAR programs on assets as appropriate</li> </ul>
Updated GHGRP Rules	Applies to all Company segments. Requires operators to revise calculations, recordkeeping and reporting of greenhouse gas emissions through updated methodologies and new and updated source emission factors (effective January 2025).	<ul style="list-style-type: none"> <li>• Continuing to preemptively include sources covered under the NGSi and ONE Future protocols in our emissions disclosed in this Report</li> <li>• Continuing to calculate CO<sub>2</sub>e values in accordance with the published 100-year time horizon global warming potential (GWP) values from the IPCC Fifth Assessment Report (AR5, 2014) as preferred by SASB</li> </ul>
New York Climate Act	Created emissions reduction and electric generation mandates, and drove related regulatory actions, which could impact the Downstream Segment's customer base and create greater challenges in the development of natural gas infrastructure. In connection with the Climate Act, New York also enacted legislation that includes a natural gas ban for certain new construction beginning in 2026.	<ul style="list-style-type: none"> <li>• Enacting the Utility's LTP incorporating specific decarbonization actions</li> <li>• Developing customer non-pipe alternative solution protocols, certified and renewable natural gas procurement pilot programs and hybrid heating and demand response pilot programs</li> </ul>





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# Ecological Impacts and Biodiversity Protection

National Fuel remains focused on ensuring our operations have minimal impacts on the environment and natural resources in and around our operating footprint. With environmental stewardship as one of our guiding principles, environmental protection and conservation of resources are embedded within our policies, procedures and project development. We utilize procedures, technologies, and best management practices across our businesses to develop, build and operate our assets in a manner that respects and protects the environment.

## Management of Environmental Program, Policies and Practices

Consistent with our [Environmental Policy Statement](#), complying with all environmental laws and regulations and integrating environmental protections and conservation considerations into our planning and decision-making remains a high priority for the Company. The importance of environmental compliance is emphasized throughout all levels of the

Company, including executives, managers, inspectors, engineers, employees and the environmental team, as well as with our contractors. Additionally, quarterly meetings are held at the executive level to discuss environmental matters across all segments of the Company.

## Downstream and Midstream Segments

In the Downstream and Midstream Segments, the environmental group facilitates and ensures compliance by coordinating effective management policies and practices for our projects and assets within our service territory. The Company maintains guidance relating to resource impact minimization and environmental compliance such as National Fuel's Engineering Design Manual (EDM) and its Erosion and Sedimentation Control and Agricultural Mitigation Plan (ESCAMP), among other specifications. National Fuel's construction, operation, maintenance and expansion of natural gas facilities is closely coordinated with local, state, federal and tribal authorities, where appropriate.

The impact that both existing and potential environmental regulations may have on our environmental management program are continually reviewed and evaluated. Dedicated groups consisting of members from our environmental team, legal counsel, construction management and executive management meet regularly. These meetings are used to discuss proposed policies and regulations, project-specific compliance conditions and tasks, review monitoring and inspections, and design future action plans.

We routinely engage with organizations such as the American Gas Association (AGA), Interstate Natural Gas Association of America (INGAA), Northeast Gas Association (NGA) and the Marcellus Shale Coalition (MSC) to discuss these important industry issues. National Fuel voluntarily commits to many natural gas industry best practices including:

- Environmental Inspector Guidance Recommended Qualifications and Best Practices
- [INGAA Greenhouse Gas Emissions Commitments](#)
- [INGAA Commitments to Responsible Pipeline Construction](#)
- [INGAA Commitments to Pipeline Security](#)
- [INGAA Commitments to Landowners](#)
- [INGAA Commitment to Pipeline Safety](#)

## Upstream Segment

Our Upstream Segment maintains an Environmental Health and Safety (EHS) Policy, which reflects Seneca's EHS values. The EHS Policy is regularly reviewed, updated and approved by Seneca leadership. Quarterly management review meetings are also held between the Seneca EHS team and senior leadership to discuss environmental, health, safety and sustainability activities, metrics and opportunities.

The Seneca Integrated Management System (IMS) is a comprehensive system that applies to all aspects and phases of our operations. This system is modeled after ISO Standards, Equitable Origin's EO100™ Standard for

Responsible Energy Development and the International Finance Corporation Performance Standards. Although Seneca does not formally participate in or apply for certification in ISO 14001 (Environmental Management), or ISO 45001 (Occupational Health & Safety Management), those frameworks are used as the foundation for creating a complete management system for our upstream operations. Seneca also has a set of BMPs for critical operations such as containment construction and flowback operations. These BMPs are in addition to our standard operating procedures and other guidance documents for normal activities.





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# Project Planning and Development

The Company integrates environmental protection considerations into its project planning and decision-making. The Company’s project planning involves significant efforts to avoid ecologically sensitive areas where threatened and/or endangered species exist or that have high ecological value in terms of ecosystem function, species richness or diversity. The foundation of this planning is built around our compliance with applicable federal, state and local laws and regulations, as we regularly consult with federal and state agencies to identify ecologically sensitive areas.

Environmental Regulatory Engagement	Environmental Stakeholder Engagement	Community Outreach and Landowner Engagement
<ul style="list-style-type: none"> <li>• United States Army Corps of Engineers (USACE)</li> <li>• Federal Energy Regulatory Commission (FERC)</li> <li>• United States Fish and Wildlife Service (USFWS)</li> <li>• State Historic Preservation Office (SHPO)</li> <li>• New York State Department of Environmental Conservation (NYSDEC)</li> <li>• New York Natural Heritage Program (NYNHP)</li> <li>• Pennsylvania Department of Environmental Protection (PADEP)</li> <li>• Pennsylvania Fish and Boat Commission (PAF&amp;BC)</li> <li>• Pennsylvania Game Commission (PGC)</li> <li>• Pennsylvania Department of Conservation and Natural Resources (DCNR)</li> </ul>	<ul style="list-style-type: none"> <li>• Early identification and coordination with private, local, tribal, state and federal agencies and stakeholders</li> <li>• Engagement with applicable ecological experts/agencies to assess potential impacts to stream and wetland resources, cultural and historic resources, threatened and endangered species and to consider potential storm water or floodplains, civil engineering, and steep slope stabilization/mitigation concerns</li> <li>• Engagement in project routing and planning exercises to assist with resource avoidance, impact minimization and development of project-specific alternatives analyses, where practicable</li> </ul>	<ul style="list-style-type: none"> <li>• Early and regular contact, review, engagement, coordination, negotiation and issue-resolution with affected landowners, tenants, communities and others that may be potentially affected by the proposed project</li> <li>• Engagement with local tribal and government officials make them aware of the proposed project and to help them address questions from their constituents</li> <li>• Review of facility locations and safety procedures with emergency responders</li> <li>• Establishing a National Fuel point of contact for stakeholders to communicate with throughout the construction of the project</li> <li>• Conducting and participating in public meetings to discuss potential short term and long term environmental and landowner considerations with the public; affected landowners, local, state and federal authorities; tribal representatives, as well as any other stakeholders</li> </ul>



Tree root wads added along the stream bank to provide aquatic habitats

## Implementing Lessons Learned

National Fuel strives to achieve zero incidents of environmental non-compliance associated with the thousands of construction and maintenance-based field activities undertaken annually by the Company. We believe it is important to use past experiences, both positive and negative, to shape our plans and policies with the goal of zero incidents. In 2023, our Midstream Segment was subject to two Notices of Violation (NOV) at National Fuel Gas Midstream Covington, LLC.<sup>2</sup>

All NOVs are analyzed and actions are implemented to reduce the recurrence of similar issues on National Fuel projects. In addition, “lessons learned” meetings focus on the implementation of proactive measures to avoid future NOV for similar incidents. These proactive measures address waste, air quality/emissions, water discharges, water withdrawals, effluent limits, wastewater pretreatment requirements, oil or hazardous substance spills, land use and endangered species.

**Additionally, the measures include:**

- Executive-level environmental compliance sponsorship;
- Enhanced agency coordination;
- Development of improved internal environmental inspection management procedures; and
- Enhanced training for project team members, members of the environmental compliance team, management staff and contractor personnel, as appropriate.

<sup>1</sup> Projects requiring state earth disturbance permits were included in this analysis. For New York, this includes projects involving over one acre of earth disturbance (SPDES), and for Pennsylvania, this includes projects over five acres of earth disturbance (ESCGP-3).  
<sup>2</sup> The Notices of Violation were associated with a sump pit that had filled with sediment causing runoff to undermine the existing compost filter sock after a significant precipitation event. Pits in the surrounding area were cleaned and the site was remediated before the end of the day with photos provided to PADEP.



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## Pipeline Project Construction and Restoration

### Pre-Construction

Initial project screening involves review of desktop resources, submission of applicable agency consultations and permits, as well as the development of Erosion and Sediment (E&S) Control Plans. Permitting agencies review projects and provide specific considerations and permit conditions. Informed by applicable regulations and guidance, as well as our internal ESCAMP and EDM, projects may necessitate:

- Threatened and endangered species mitigation measures
- Site-specific restoration plans
- Post-construction stormwater management plans

Following the preliminary project coordination and permitting, a pre-construction meeting is held to review and discuss all compliance considerations, plans, agreements, permits and clearances, construction techniques and restoration expectations. Construction plan implementation, monitoring/remediation and procedures are discussed in detail with pertinent internal project management personnel, general contractors and sub-contractors. National Fuel may also host other pre-construction training to effectively communicate important environmental permitting information and concerns.

### Construction

Once construction commences, in addition to agency-approved permits and plans, the Company requires full compliance and implementation of applicable environmental management policies and plans developed during pre-construction. At the project site, E&S control devices are installed and signage identifying wetlands, streams, approved access roads and roads prohibited for use are posted prior to earth disturbance activities. Company personnel and/or third-party environmental inspectors monitor site adherence to the construction sequence. Throughout the duration of construction, E&S control devices are monitored and maintained.

### Restoration

Our goal is to establish, strengthen and enhance positive relationships with all project stakeholders. This includes restoring resources and property to a condition that is as good or better than prior to project commencement. We view landowners as long-term partners with equal and mutual interests. To ensure that landowner concerns are heard and acted upon, our procedures include grievance reporting mechanisms for landowners.

National Fuel monitors the status of vegetation growth and establishment, and performs follow-up inspections, monitoring and reporting to permitting agencies until permit closeout. Invasive species mitigation, stream/wetland restoration and post-construction stormwater controls are monitored for effectiveness.

Project site restoration may enhance existing habitat through wetland seeding and planting practices or create additional species habitat through strategic placement of timber, brush and/or stone, and riparian stabilization techniques adjacent to aquatic resources.

The Company implements best management practices aimed to restore project sites to pre-construction conditions. This includes grading and topsoil replacement, as well as the restoration of natural contours and drainages. Additionally, excess rock is removed from the top foot of soil in all agricultural fields, pastures and residential areas. Buried rock that is above the top of existing bedrock profile in agricultural lands is also removed. Trash is removed and properly disposed of, and once vegetation regrowth has met or exceeded at least 80% coverage, E&S controls are removed.

### Inspection

Employees and contractor personnel routinely perform site inspections throughout the duration of the project. National Fuel has established standardized guidance related to inspection of inactive construction projects and developed a notification system for inspection of active/inactive sites before and after inclement weather. Our project sites also undergo frequent agency inspections, often unannounced, and we consider these as opportunities to demonstrate our continuous compliance with the respective agency requirements.

### Facility Operation

Once construction or maintenance of a pipeline or facility and associated areas have been restored, the project moves into the operational phase. During this phase, routine maintenance and monitoring practices help ensure that the installed facilities remain integrated with the natural environment. National Fuel strives to seed project sites and rights-of-way (ROW) with native pollinator species, creating habitat for migratory bird species, supporting sensitive plant and animal species and allowing for the proper restoration of valuable wetland and stream resources. Our ROW maintenance practices, pollinator seeding, habitat creation and invasive species mitigation efforts help restore areas with native species.

## Line SNY Pipeline Modernization Project (Supply Corporation)



During Construction



One Year Post Construction



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## Minimizing Our Footprint and Land Disturbance<sup>1</sup>

National Fuel aims to avoid areas with protected conservation status of endangered species and works to ensure our activities have minimal impact on local aquatic, terrestrial and wildlife resources.

### Midstream Segment

Our Midstream Segment utilizes mapping tools and surveys to identify threatened and endangered species. We have implemented several practices designed to protect threatened and endangered species. This includes conducting habitat surveys and the restriction of construction activities during specific time frames and the preservation and restoration of habitats. Additionally, soil, vegetation and other resources are banked during construction projects and repurposed during restoration projects. Specialized native seed mixes are used during replanting to prevent erosion and sedimentation, enhance wildlife foraging areas, promote endemic pollinator species and to re-establish indigenous wetland species.

### Land Owned, Leased or Operated within Areas of Protected Conservation Status or Endangered Species Habitat (acres)

Our Midstream Segment strives to minimize impacts to protected conservation areas and endangered species' habitats. This is accomplished through continuous agency consultation and a thorough analysis of appropriate avoidance, minimization and mitigation measures. The following table shows the percentage of land operated near or within areas environmentally sensitive areas. This includes lands with a protected conservation status or critically endangered species habitat ("Designated Areas"). Although approximately 50% of land that our Midstream Segment owns, leases and operates is near (within 5 kilometers of) a Designated Area, only approximately 2% is within Designated Areas. This reduced percentage is due to our efforts related to project siting, scoping and resource avoidance measures.

Total Midstream Segment	2023
Total Operating Footprint (Acres)	15,829
Operating Footprint (Acres) Near Designated Areas <sup>2,3</sup>	7,949
% of Total	50%
Operating Footprint (Acres) Within Designated Areas <sup>2,4</sup>	252
% of Total	2%

### Number and Volume of Hydrocarbon Spills

The Midstream Segment works diligently to prevent the occurrence of hydrocarbon spills on projects and worksites. Specific plans, such as Spill Prevention and Response Procedures Plans, Spill Prevention, Control and Countermeasure Plans and Inadvertent Return Plans are in place to prevent spills and provide guidance to remediate a spill. If a spill occurs, personnel and response teams are deployed to properly contain and remediate spill exposure to the environment. Appropriate agencies are notified, as required, by procedures, plans and regulations.

	2023
Number of Hydrocarbon Spills > 1 Bbl <sup>5</sup>	2
Total Volume of Hydrocarbon Spills Reported (Bbl)	8
Total Volume of Hydrocarbon Spills Recovered (Bbl) <sup>6</sup>	8
Total Volume of Hydrocarbon Spills Impacting Unusually Sensitive Resources (Bbl) <sup>7</sup>	0
Number of Non-Hydrocarbon Spills > 1 Bbl	0
Total Volume of Non-Hydrocarbon Spills Reported (Bbl)	0
Total Volume of Non-Hydrocarbon Spills Recovered (Bbl)	0
Total Volume of Non-Hydrocarbon Spills Impacting Unusually Sensitive Resources (Bbl)	0

Only 2% of our Midstream Segment operating footprint is within areas of protected conservation status or critically endangered species habitat



<sup>1</sup> Disclosures surrounding operations within designated areas and hydrocarbon spills are not SASB metrics for utilities, which is why the Downstream Segment is not represented within this section.

<sup>2</sup> World Database on Protected Areas (WDPA) and Ramsar Wetlands of International Importance data was used to determine areas of protected conservation status. The United States Fish and Wildlife Service Environmental Conservation Online System (USFWS ECOS) was used to analyze land considered to be active proposed and final critical habitat for endangered species. This database was used in lieu of the IUCN Red List of Threatened Species defined in the SASB standard due to USFWS's involvement and review of our Midstream Segment's projects. These datasets were accessed on April 24, 2023.

<sup>3</sup> Acreage within 5 kilometers of the boundary of lands designated as a protected conservation area or as endangered species habitat

<sup>4</sup> Acreage within the boundary of lands designated as a protected conservation area or as endangered species habitat.

<sup>5</sup> A spill is defined as greater than 1Bbl (42 U.S. gallons or 159 liters). Spills include those that reached the environment and exclude spills that were contained within impermeable secondary containment.

<sup>6</sup> The number of spills recovered is the amount of spilled hydrocarbons removed from the environment through short-term spill response activities, excluding amounts that were recovered during longer-term remediation at spill sites and amounts that evaporated, burned, or were dispersed.

<sup>7</sup> Unusually Sensitive Areas in the U.S. is characterized using the definition provided by PHMSA.



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### Upstream Segment

Seneca's multi-well pad development practices allow us to maximize the natural gas reserves that we can access underground while minimizing the footprint required at the surface for our operations. We are often able to drill 10 or more wells from a single surface pad and extend the lateral length of our horizontal wells up to three miles under the surface. Seneca has extended this minimization by returning to existing Marcellus pads to drill additional wells into the Utica Shale formation.

#### Reserves Located Within Sites with Protected Conservation Status or Endangered Species Habitat (Bcfe)

Seneca has submitted more than 150 Pennsylvania Natural Diversity Inventory (PNDI) permits over the past 5 years. These permits are a part of the Pennsylvania Natural Heritage Program (PNHP) partnership between various state regulatory agencies that review these submittals for potential impacts to threatened, endangered, special concern species and special concern resources.

Permits are submitted and reviewed against the varying agencies' mapping of protected habitats statewide. If threatened or endangered species show up in this review, the area is surveyed to confirm whether the species of special concern is present in the permit area. If these species are found, mitigating actions are taken, including route avoidance, special fencing or other restrictions.

#### Total Seneca Reserves Near Sites with Protected Conservation Status or Endangered Species Habitat

Total Reserves (Bcfe) at fiscal year-end 2023	4,536
Reserves Within Sites with Protected Conservation Status (Bcfe)	16
% of Reserves within Protected Conservation	<1%
Reserves Within Areas in Which Endangered Species Habitat Identified (Bcfe)	333
% of Reserves within Areas of Endangered Species	7%

#### Number and Volume of Hydrocarbon Spills

	2023
Number of Hydrocarbon Spills > 1 Bbl	0
Total Volume of Hydrocarbon Spills (in Bbls)	0
Total Volume of Hydrocarbon Spills Impacting Environmentally Sensitive Shoreline <sup>1</sup>	0
Total Volume of Hydrocarbon Spills Recovered (in Bbls)	0
Number of Non-Hydrocarbon Spills > 1 Bbl	3
Total Volume of Non-Hydrocarbon Spills (in Bbls)	1,502
Total Volume of Non-Hydrocarbon Spills Recovered (in Bbls)	Unable to estimate <sup>2</sup>

**Less than 1%** of our Upstream Segment Reserves are within Sites with Protected Conservation Status



<sup>1</sup> The scope of spills to environmentally sensitive shorelines includes hydrocarbon spills to water that reached the soil or spills directly to the soil of shorelines with Environmentally Sensitive Index levels 8 through 10, where levels are defined according to U.S. National Oceanic and Atmospheric Administrations (NOAA)'s shoreline sensitivity rankings list: <https://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/resources/shoreline-sensitivity-rankings-list>  
<sup>2</sup> Brine mixed with precipitation, so an accurate estimate of volume recovered could not be calculated, but we believe a majority of the volume was recovered due to immediate response.  
<sup>3</sup> The Upstream Segment does not operate in the Arctic, which is considered to be the area north of the Arctic Circle.



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# Forest Conservation and Restoration Projects



## Forest Enhancements to Previous ROW

In Moshannon, Elk and Susquehannock State Forests, our Midstream Segment worked with Pennsylvania Game Commission foresters to enhance the forest along a previous ROW. Enhancement measures included the planting of nearly 67,000 trees, numerous gate removals/ installations and rock barricades.



## Elk State Forest Native Planting

Our Midstream Segment continues to partner with DCNR to overseed areas used by wildlife and pollinators within the Elk State Forest to promote diversity and improve habitat. Over the last five years, approximately 24 acres have been planted.



## Midstream Segment Acreage Disturbed and Restored

The following table displays the total terrestrial acreage restored by our Midstream Segment as a percentage of impacted area. The acreage of disturbed land was calculated by totaling the acreage associated with projects requiring a state earth disturbance permit in calendar year 2023. If restoration is initiated after October 15, areas are winterized or temporarily restored and stabilized until the seasonal conditions allow for permanent restoration. Permanent restoration is conducted after April 1. National Fuel strives to fully restore project areas within one year of the in-service date. Our ESCAMP is used as a guide during construction and restoration unless specific requirements are given by regulatory agencies or landowners.

	2023
Acres not Permanently Restored from prior years <sup>1</sup>	38
Acres Disturbed in current year	429
Total Acres Impacted	467
Acres Permanently Restored in current year <sup>1</sup>	392
% of Impacted Area Permanently Restored in current year	84%

<sup>1</sup> Includes acreage associated with projects that commenced permanent restoration in 2022. This includes initiating permanent restoration on projects that were constructed 2021 that only had temporary restoration completed during that year. Permanent restoration is defined as areas for which final decompaction, grading, topsoil replacement, installation of permanent erosion control structures, lime, fertilization and seeding have been completed, even if monitoring is on-going. Areas where impervious surfaces or stormwater controls have been installed are also considered to be permanently restored.



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# Biodiversity Enhancement and Wildlife Conservation

The routine restoration and maintenance procedures that we implement to protect habitat within our operating area are often supplemented with additional opportunities to further engage with applicable stakeholders to create, conserve or enhance natural areas, or otherwise afford additional ecological protection.

## Wildlife Rehabilitation and Bat Conservation

National Fuel partnered with a local NYSDEC Rabies Vector Species Wildlife Rehabilitator to assist with the transfer and release of rescued bats found across Western New York.

Both the eastern red bat and big brown bat were among the species transferred for release after



they were rescued and given a safe place to hibernate over winter.

## Seneca Surface Footprint Neutral Program

To demonstrate its commitment to the environment, our Upstream Segment created a Surface Footprint Neutral Program to restore one acre of land for every acre disturbed by its operations through:

- Planting trees and native pollinators
- Watershed and wildlife conservation projects
- Beneficial reuse of natural resources
- Monitoring and removing invasive plants

## National Fuel Pollinator Program

Our Downstream and Midstream Segment businesses have enrolled 30,952 acres of transmission and distribution pipeline system ROWs into the Nationwide Candidate Conservation Agreement with Assurances (CCAA) for the monarch butterfly. The intent of the CCAA is to enhance and expand available monarch butterfly habitats through conservation measures. As part of the program, the Company has implemented conservation mowing, idle lands and set asides, and use of pollinator seed mixes during restoration.



## 2023 Surface Footprint Neutral Program Goals and Achievements

- Prioritized operating areas to maintain and improve biodiversity on an acre for acre replacement of annual pad and road development
- Restored over 71 acres of habitat, surpassing the 37 acres used for construction
- Improved environmental biodiversity as well as community recreational access



## 2023 Pollinator Program Achievements

- Exceeded our target goal by 35% and provided 4,086 acres of conservation measures within our CCAA enrolled lands
- Planted approximately 78 acres of native pollinator seed mixes
- Monitored 46 randomly selected plots within ROWs for pollinator and monarch butterfly habitats.
- Monitoring results indicated an average of 88 milkweed stems and 39% nectar plant cover per habitat acre within sample ROWs.
- Voluntary participation on the Industry Advisory Council for the development of the Bumble Bee Agreement, similar to the Monarch CCAA Agreement, in collaboration with the USFWS.
- Agreement aims to protect 11 species of bumble bee, including the endangered rusty patched bumble bee, as well as the yellow bumble bee and American bumble bee.





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# Water Conservation Projects



## Middle Fork East Branch Clarion River Conservation Project

Seneca and several partner organizations completed a significant conservation project aimed at enhancing and protecting aquatic life in the Clarion River Watershed. The project involved removing a section of road and a large pipe culvert that crossed the Middle Fork East Branch Clarion River in Elk County, Pennsylvania. Middle Fork is the last opportunity for fish to swim upstream and lay their eggs before encountering a dam on the East Branch Clarion River.



## West Branch Clarion River Conservation Project

Seneca repurposed materials from well pad construction and helped stabilize the banks of the Clarion River by adding root wads and stones, enhancing aquatic wildlife and diversity. This project was led by the Western Pennsylvania Conservancy with partners Trout Unlimited, DCNR, Seneca and contractors. This project also improved community recreational access, as this section of the river is a designated catch and release fly-fishing area.



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# Water Management and Integrity

National Fuel is committed to environmental stewardship and the protection of natural resources, including water. Our Upstream Segment developed high-quality infrastructure to handle all aspects of our water management needs, including storage, treatment, transportation, recycling and disposal. Our Downstream and Midstream Segments aim to minimize impacts to water resources during pipeline construction by using effective, proven construction best management practices and protective water-body crossing methods.

## Upstream Segment's Focus on Protecting Fresh Water Aquifers

### Drilling Practices

Seneca's horizontal drilling practices use water-based drilling fluid or air when drilling through freshwater zones. During other stages of drilling, a synthetic oil-based mud system is used once freshwater zones are protected by casing and cement.

### Mechanical Integrity Assessments

Seneca performs quarterly mechanical integrity inspections of all operating wells to ensure the well integrity is intact and can contain and isolate gas and brine from drinking water supplies. If any mechanical integrity issues are identified during the inspection process, they are investigated and remediated.

### Pre-Drill Water Sampling

Seneca performs pre-drilling water sampling on any water source within a 4,000-foot radius from the center of the pad to obtain a baseline measurement; this extended radius is more than the 2,500-foot Pennsylvania regulatory requirement. Seneca contracts with an independent third-party environmental consultant to compile a list of property owners who are notified of the proposed drilling activities and Seneca's intention to sample their water source(s). The environmental consultant collects necessary groundwater and surface water samples and sends them to a state certified laboratory for testing. The analytical results are electronically submitted to the PADEP and are also shared with the landowner.

### Water Quality Investigations

Seneca investigates and performs post-drill sampling if a water quality complaint is filed. Complaints are infrequent, and the root cause is often determined to be unrelated to oil and gas activities.

### Containment Best Practices and "Zero Surface Discharge" Policy

Seneca follows a "Zero Surface Discharge" policy, to contain any liquids or solids that may be considered residual waste as a means of protecting surface and groundwater resources throughout the life of a well. Wastes and chemicals are managed in "primary containment" vessels, which are placed inside of secondary containment systems, and often tertiary containment, designed to capture and control spills or leaks.





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## Highland Field Services

Since its inception in 2015, Highland has invested \$108 million in water infrastructure in Pennsylvania, including storage and treatment facilities, on-pad tanks and containment vessels, injection wells and a network of water distribution pipelines. The environmental, operational and economic goals and achievements of Highland include:

### Recycling Produced Fluids

Seneca operates in the Appalachian basin in areas with low and low-medium water risk per the Aqueduct Water Risk Atlas and optimizes the ability to use recycled produced fluids. Highland receives and recycles produced volumes generated from third-party operators, who would otherwise need to transport their produced fluids for out-of-state disposal. In 2023, Seneca's Marcellus and Utica shale well completions used 62% recycled fluids and only 38% freshwater.



Highland recycled **more than 90%** of Seneca's produced fluids

## Reducing Environmental Footprint

Highland's pipeline distribution system delivers fluids from storage facilities directly to Seneca's Marcellus and Utica development pads. This vast pipeline network helps reduce truck traffic, leading to a decrease in emissions and less wear on the roads. It also increases safety and minimizes traffic congestion in communities.

### Developing Innovative and Environmentally Sound Disposal Solutions

Seneca and Highland actively develop their own underground disposal well capabilities as part of an underground injection control (UIC) program designed to manage Seneca's disposal needs in an environmentally sound manner. Seneca and Highland currently have operating UIC wells in Pennsylvania.

## Promoting Transparency and Regulatory Compliance

Fluid handled by Highland is tracked for regulatory and internal reporting purposes. We report the fluid movement and usage in various forms, including downhole volumes for well completion, incoming/outgoing loads at the storage facilities and pads, fluids utilized by third-party operators and freshwater storage levels across our operations.

## Public Disclosure of Fracturing Chemicals Used

**Since February 2011, 100% of the chemicals used in Seneca's hydraulically fractured wells have been disclosed** on [www.fracfocus.org](http://www.fracfocus.org), the chemical registry website created by the Ground Water Protection Council and the Interstate Oil and Gas Compact Commission. This site contains detailed information about the hydraulic fracturing process and a listing on a well-by-well basis that specifies the contents of hydraulic fracturing fluids used at each location.

### Chemical Usage

Seneca does not use diesel and/or BTEX (benzene, toluene, ethylbenzene, xylenes) chemicals during fracturing operations. We continually look for opportunities to use "green" chemicals during completions operations. The friction reducer we utilize has been certified to NSF/ANSI Standard 60, a standard which ensures the safety and suitability of chemicals used in public drinking water supplies. In addition, the volume of chemicals being utilized is regularly evaluated, and opportunities to reduce the volume and/or concentration of chemicals is a priority.



Highland's Clermont Storage Facility is located in the heart of Seneca's Western Development Area operations and provides a centralized location for produced fluid storage.



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# Waste Management

## Corporate Waste Management Program

National Fuel is committed to reducing the quantity of waste, both hazardous and non-hazardous, generated through our operations. To this end, the Company tracks the wastes generated at its facilities and evaluates ways to reduce the rate of, or eliminate where possible, the generation of certain wastes. All segments of National Fuel have waste management plans to help ensure the proper management, storage, handling and disposal of waste. Our routine business operations produce various types of waste, including:

- Used oil
- Construction and demolition debris
- Drill cuttings
- Scrap steel
- Non-hazardous waste and residual waste (e.g., brine, glycol)
- Universal waste (e.g., used batteries, fluorescent light bulbs, waste aerosols)
- Hazardous liquids and solid waste (e.g., spent solvents, hydrocarbon liquids)

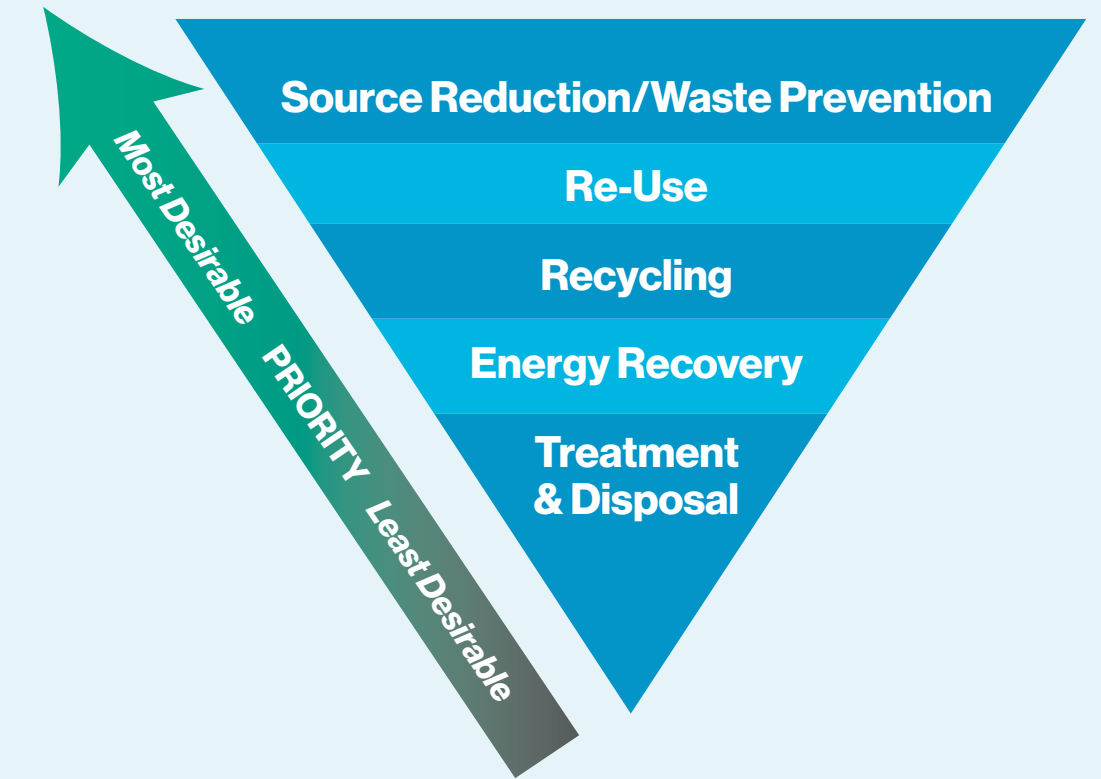
Executive level oversight is incorporated into the Company's waste minimization plans to further highlight the level of importance the Company places on waste management. Additionally, employees are encouraged to promote new ideas for waste minimization, energy conservation and protection of the environment.

We understand that to effectively manage the Company's waste streams from our core operations we need to accurately characterize waste, as well as its tracking and disposal. The EPA requires generators of hazardous wastes to determine the waste generator status of each facility based on the amount of waste generated in a calendar month. Most of our Downstream and Midstream locations either do not generate any hazardous wastes or produce small amounts of hazardous wastes, placing them in the Very Small Quantity Generator<sup>1</sup> category. Occasionally, a facility may generate enough hazardous waste to meet the Small Quantity Generator<sup>2</sup> or Large Quantity Generator<sup>3</sup>

threshold, however, those instances are rare and are often an episodic event. Our Upstream Segment did not produce any hazardous waste in 2023.

The Company tracks wastes generated at its facilities and actively evaluates ways to eliminate, reduce, reuse and recycle various waste streams. This is accomplished through effective vendor selection, product evaluations, inventory assessments, beneficial reuse assessments, recycling and treatment processes. We have adopted the EPA's Waste Management Hierarchy to prioritize waste minimization preferences, as shown on the right.

## Waste Management Hierarchy



## Downstream and Midstream Segments<sup>4</sup>

### Solid Wastes



**Non-Hazardous  
99%**

### Liquid Wastes<sup>5</sup>



**Non-Hazardous  
99%**

<sup>1</sup> Generate no more than 100 kg (220 lbs) of hazardous waste, or 1 kg (2.2 lbs) of acutely hazardous waste in a calendar month.  
<sup>2</sup> Generates more than 100 kg (220 lbs) and less than 1,000 kg (2,200 lbs) of hazardous waste, or 1 kg (2.2 lbs) of acutely hazardous waste in a calendar month.  
<sup>3</sup> Generates more than 1,000 kg (2,200 lbs) of hazardous waste, or greater than kg (2.2 lbs) of acutely hazardous waste in a calendar month.  
<sup>4</sup> Our Upstream Segment does not produce any hazardous wastes.  
<sup>5</sup> Excludes produced water.



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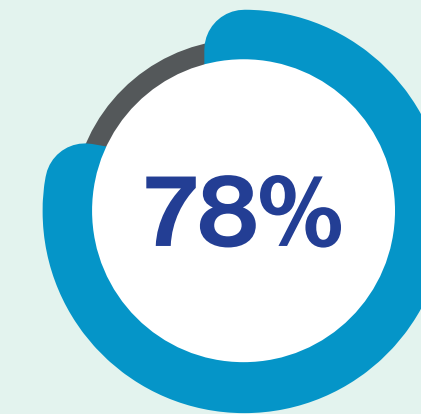


Source Reduction/Waste Prevention	Re-use	Recycling	Treatment	Disposal
Begins with the practice of reducing or eliminating the waste altogether by product substitution, inventory control, good housekeeping, equipment maintenance and equipment and technology upgrades.	Varies from simple repurposing of a used item (identified through periodic inventory assessments and environmental audits), regenerating fluids used in our gas system equipment, or sale/transfer of unneeded products or wastes to a broker/recycler. The most significant reuse stream involves produced water.	Recycling can occur either in-house, onsite or off-site at a recycling facility. A large majority of our waste streams are recycled including used batteries, fluorescent light bulbs, used oil, electronic equipment and scrap steel.	Treatment can range from simple physical separation of multiphase liquids to chemical treatments of wastes to render them less hazardous or non-hazardous. An example of the treatment methodologies we incorporate into our waste management processes include the decanting of natural gas condensates, which involves separating the water from the hydrocarbon/oil.	When the other options within the waste management hierarchy are not feasible, the waste is either incinerated, injected, or discharged through appropriate permitting, or as a last resort landfilled.

## Waste Generated

National Fuel understands the importance of proper waste management and the need to produce an effective program to mitigate adverse environmental impacts.

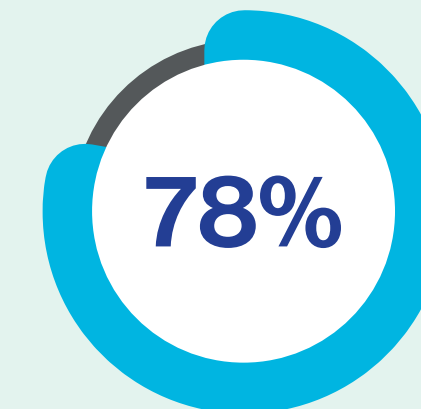
In 2023, these continued efforts to find the best waste management methods resulted in:



**Recycling of 78%** of non-hazardous solid wastes. That's over 8.7 million pounds of waste diverted from landfills.



**Only 22%** of our solid wastes (both hazardous and non-hazardous combined) are landfilled.



**Greater than 78%** of non-hazardous liquid wastes are recovered, recycled and reused.



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# Safety





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# Safety Culture and Highlights

With safety as a guiding principle, **our highest priority is the safety of our customers, employees, contractors and communities we serve.** We're proud of our safety record and work diligently to establish a safety culture that is embraced throughout the organization.

## Driving our Safety Culture

- ✓ Employee and Contractor Training and Development
- ✓ Integrity of Gas Delivery Infrastructure
- ✓ Safety Management Systems
- ✓ Operational and System Safety
- ✓ Customer Outreach and Education
- ✓ Robust Compliance Programs
- ✓ Emergency Preparedness and Response
- ✓ Dedicated Emergency Hotlines
- ✓ Critical Incident Management

## 2023 Safety Highlights

- 185,897** Total number of Safety and Operational Training hours
- 100+** Emergency Response Drills
- 90+** Meetings held with local Emergency Responders
- ✓ Implemented Operational Safety Days within Downstream and Midstream Segments
- ✓ Continued focus on leak management programs across all Segments

## Safety Management Systems

### Pipeline Safety Management System (PSMS)

Modeled after API Recommended Practice 1173 – Pipeline Safety Management Systems

### Seneca's Integrated Management System

Modeled after ISO 45001, ISO 14001 and Equitable Origin's EO100™ Standard for Responsible Energy Development



“We are committed to continuous improvement of our processes and procedures as we safely and reliably produce, store and deliver natural gas, a vital energy source that fuels the communities where we live and work.”

**Ray Harris**  
Chief Safety Officer



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# Employee and Contractor Safety

Across the Company, **we implemented safety programs and management practices to ensure that a culture of safety is prioritized.** To strengthen our safety culture, the Company has focused on in-person safety presentations with executive management team participation to endorse the trainings and emphasize safety as a core value.

Safety Communication and Engagement	Safety Preparedness	Field Safety Guidance	Reinforcing Safety as a Guiding Principle
<ul style="list-style-type: none"> <li>Frequent safety alerts, reminders and lessons learned are distributed to all employees.</li> <li>Intranet safety resource center and monthly EHS reports.</li> <li>Perform safety surveys to manage and improve our safety culture.</li> <li>Seneca has an EHS Hotline that can be used for anonymous reports from employees and contractors.</li> <li>Safety management software that includes an engagement tool for employees to submit safety observations, recommendations, good catches and near misses.</li> </ul>	<ul style="list-style-type: none"> <li>Tabletop simulations and live drills for emergency response preparedness including participation of local first responders.</li> <li>Employee and management safety calls and meetings to identify and review lessons learned, set safety expectations and raise awareness.</li> <li>Extensive employee safety training focused on equipment operation and ergonomics, emergency response and first aid, and situational awareness training.</li> <li>Vehicle and driver safety training, including the use and review of driver cameras.</li> </ul>	<ul style="list-style-type: none"> <li>“Stop Work Responsibility” provided to of all employees and contractors if they observe an unsafe practice or abnormal operating condition.</li> <li>Personal protective equipment, signage, construction site work rules, safety procedures and guidelines.</li> <li>Comprehensive web-based operating procedures to support safety and operational compliance in the field.</li> <li>Periodic safety stand-downs in the field to discuss safety issues and annual contractor safety meetings.</li> <li>Trainings are conducted for affected personnel as new state and federal regulations are finalized and become effective.</li> </ul>	<ul style="list-style-type: none"> <li>Periodic reviews conducted by Internal Audit that evaluate environmental and safety programs.</li> <li>Onsite audits and inspections performed by regulatory personnel and safety staff to reinforce safety policies and procedures.</li> <li>Management audits to reinforce safety expectations.</li> <li>Safety and environmental requirements for employees and contractors are communicated throughout the year to enforce rules and expectations.</li> <li>Executive and salaried employee compensation program metrics are tied to safety initiatives.</li> </ul>

## Continuous Improvement of Our Downstream and Midstream Operational Safety Plan

### Management’s Safety Prioritization

- Leadership from the Operations and Safety departments meet at least quarterly to review injury trends and review concerns raised at safety meetings
- Established safety goals for all employees
- Continued engagement with employees to monitor work plans and execution expectations

### Feedback from Operations Teams

- Regularly engage with Operations focus groups to align teams, review safety metrics and reinforce safety culture
- Conduct safety culture surveys and/or regularly request feedback on safety-related topics

### Reinforcement of Safety Culture

- Mandatory safety training for employees to grow knowledge and further understand how safety aligns with daily responsibilities
- Multi-disciplinary teams that conduct safety inspections and audits
- Safety alerts and messages are regularly distributed to all employees

### Focus on Operational Improvements

- “Safety First” focus for all project planning, pre-project communications and execution in the field
- “Safety Stand Downs” for specific topics to address reoccurring and serious safety issues
- Root Cause Analysis drives specific action plans to prevent injury reoccurrence
- Plan-Do-Check-Act continuous improvement cycle of programs and processes







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# Compliance, Training and Development

## Prioritizing Safety Through Compliance Programs

The natural gas industry is highly regulated at the federal, state and local levels, and the Company's compliance programs are designed to meet or exceed safety-focused requirements through identifying and implementing proactive measures to minimize the risk of non-compliance or potential regulatory enforcement actions. Through continuous compliance assessments of the Company's internal processes and procedures, we continue to improve our overall operational safety.

## Upstream Segment Safety Training Programs

At Seneca, every employee is required to complete monthly safety training on topics such as ergonomics, heat stress, winter weather hazards, driving safety and hazard communication. Employees must successfully complete a test at the end of each training session to verify comprehension.

## Downstream and Midstream Segments Operator Qualification Program and Training

Our Downstream and Midstream Segments have a comprehensive operator qualification and safety program for employees and contractors to ensure compliance with regulations, Company policies and procedures, and industry best practices.

- The Operator Qualification Program includes in-person sessions, lecture components, practical skills, on-site job demonstrations and experience requirements.
- Classes are designed to build upon each other, starting with the basics and taken sequentially with the expectation that the material and concepts covered in the previous part are bolstered with on-the-job reinforcement/training.

## Quality Assurance Group

- Identifies areas of improvement for training content and classroom material, assess Company trainers, evaluate class content and manages field assessments performed by Operations supervisors.
- Administers the Operations Supervisor Development Program intended to educate and support employees in their first years of supervision responsibilities, as well as encourage consistent responses and solutions to situations.

## Training and Field Operations Development Departments

- Accompany individuals into the field following completion of Operator Qualification instruction and training to reinforce classroom material in real-world conditions while maintaining high standards of safety and compliance.
- Onboards new field employees and supervisors, and aids in transitioning existing employees into new roles.



## Contractor Management

The Company's contractor management procedures prioritize and reinforce our safety expectations. Our high safety standards and expectations require contractors to adhere to the following standards:

- Safety pre-qualifications and reporting on environmental, health and safety (EHS) performance.
- Submission verifying compliance with all OSHA and other mandated training.
- Quarterly submission of injury and incident information.
- Compliance with all insurance requirements.

In the event contractor safety scores become unsatisfactory, we work collaboratively with contractors to implement safety improvement plans and increase inspection levels to ensure safety on our jobsites. Although rare, if safety performance does not improve to acceptable levels, a contractor will be removed from our qualified bidder list.



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# Corporate Safety Trainings

- ✓ First Aid/CPR/AED Training Offered to all Employees
- ✓ Business Continuity Simulations
- ✓ Emergency Response/ Simulation Training
- ✓ Hazardous Energy Control/ Lock-out/Tag-out
- ✓ Driver and Vehicle Safety Training
- ✓ New Hire Safety Orientation
- ✓ Downstream and Midstream Operations Safety Days
- ✓ Hazardous Waste Operations and Emergency Response (HAZWOPER)



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# Customer and Community Safety

## Public Awareness Program Focused on Pipeline Safety

From our local call center representatives to operations and customer service personnel in the field, our employees are dedicated to producing and delivering natural gas to our customers safely and efficiently. Our Downstream and Midstream Segments' Public Awareness Program is designed to increase safety by increasing the public's knowledge of pipeline locations and safety precautions. By sharing information with key stakeholder audiences, including the affected public, emergency responders, excavators and public officials, National Fuel intends to raise awareness of our pipeline facilities and help the public better understand the role they can play in pipeline safety.

Educational Objectives	External Stakeholder Engagement	Public Outreach
<ul style="list-style-type: none"> <li>• <b>One-Call System:</b> Encourage use of a notification system prior to excavation and other damage prevention activities.</li> <li>• <b>Improve Recognition:</b> Identification of physical indications of a possible release.</li> <li>• <b>Know What To Do:</b> Public safety steps to take and how to report a potential gas pipeline release.</li> <li>• <b>Raising Awareness – Residential Methane Detector Pilot Program:</b> Provides customers with methane detectors for residential use, free of cost to detect levels of methane in the air and alert customers through an alarm. Pilot focused on elderly, blind, disabled and low-income customers in New York Utility service territory.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>First Responder Relationships:</b> Maintain liaisons with appropriate fire, police, first responders and public officials.</li> <li>• <b>Municipal Planning and Permitting:</b> Meetings with officials to encourage them to (1) make permit applicants aware of one-call regulations, and (2) require inclusion of pipelines and easements on site plans to prevent excavation damages and future encroachments.</li> <li>• <b>Regional Pipeline Safety Meetings and Tabletops:</b> Meetings for the benefit of excavators and emergency responders.</li> <li>• <b>Encroachment Agreements:</b> Address safety requirements for encroachments on pipeline rights-of-way (e.g., excavators, drilling operators, loggers, utilities, homeowners).</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Direct Mail Program:</b> Audience-specific pipeline safety brochures are mailed to (1) landowners, residents, schools and businesses within 660-feet of Department of Transportation (DOT) jurisdictional transmission pipelines, and (2) excavators, emergency officials and local public officials in our service territory.</li> <li>• <b>Safety Campaigns:</b> Bill inserts, ads (newspaper, online, radio, television, billboards) and news releases regarding pipeline safety.</li> <li>• <b>Online Presence:</b> Dedicated pipeline safety stakeholder engagement web page.</li> <li>• <b>Educating Other Industries:</b> Public awareness mailings regarding pipeline safety in the agricultural and forestry industries.</li> <li>• <b>School Safety:</b> Correspondence to school principals regarding pipeline safety for distribution to student body and/or educators.</li> </ul>



### 2023 Gas Safety Campaign

- **Over 60 million impressions were made** using radio, digital platforms, outdoor, and television advertising concerning natural gas and pipeline safety topics within our utility service area.
- **Pipeline safety brochures** were mailed to more than 91,000 stakeholders.
- **Supplemental mailings** that include information on Cross Boring, Meter Safety, the Agriculture Industry, Forestry/Logging and Emergency Management & Responders were mailed to more than 13,000 stakeholders.



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## Pipeline Damage Prevention

Our Downstream and Midstream segments dedicate significant resources to educate contractors, employees, customers and the public on the importance of safe excavation practices to identify potential risks using historical data, and to prevent damage to our system.

Awareness Campaigns	System Management Focused on Damage Prevention and Minimization	Reinforcing Safe Excavation Practices
<ul style="list-style-type: none"> <li>• “Call Before You Dig” Campaign including multi-media educational outreach to local municipalities and third-party excavators</li> <li>• “Look Out for the Mark Out” Program incentivizes employees through tiered awards to intervene in excavation activity being performed without a One-Call request near Company facilities. There were 405 interventions in 2023.</li> <li>• Damage Prevention Coordinators involved with external organizations that focus on local initiatives to prevent damages to underground utility lines</li> </ul>	<ul style="list-style-type: none"> <li>• Installation of excess flow valves (EFVs) on distribution system, which automatically shut-off the flow of gas if the service line is damaged; Distribution Corporation has installed approximately 209,300 EFVs to date</li> <li>• Damage Prevention Inspection Program that utilizes a risk modeling system to identify threats to Company facilities based on past excavator damages, and then deploys third-party inspectors to educate these excavators on code requirements and safety precautions</li> <li>• Midstream Segment continues installation of remote control valves and rupture mitigation valves to protect higher risk regions, allowing for a rapid shutdown of pipeline facilities when an incident has been confirmed</li> </ul>	<ul style="list-style-type: none"> <li>• Company personnel attend pre-construction meetings with contractors and facility owners to emphasize safe excavation practices</li> <li>• Company personnel perform standby inspection during excavation near critical facilities</li> <li>• Operations personnel and contractor employees are required to attend operator excavation class focused on use of mechanized equipment in vicinity of a gas facility, One-Call regulations, facility marking colors, proper pipeline support and backfilling procedures</li> </ul>

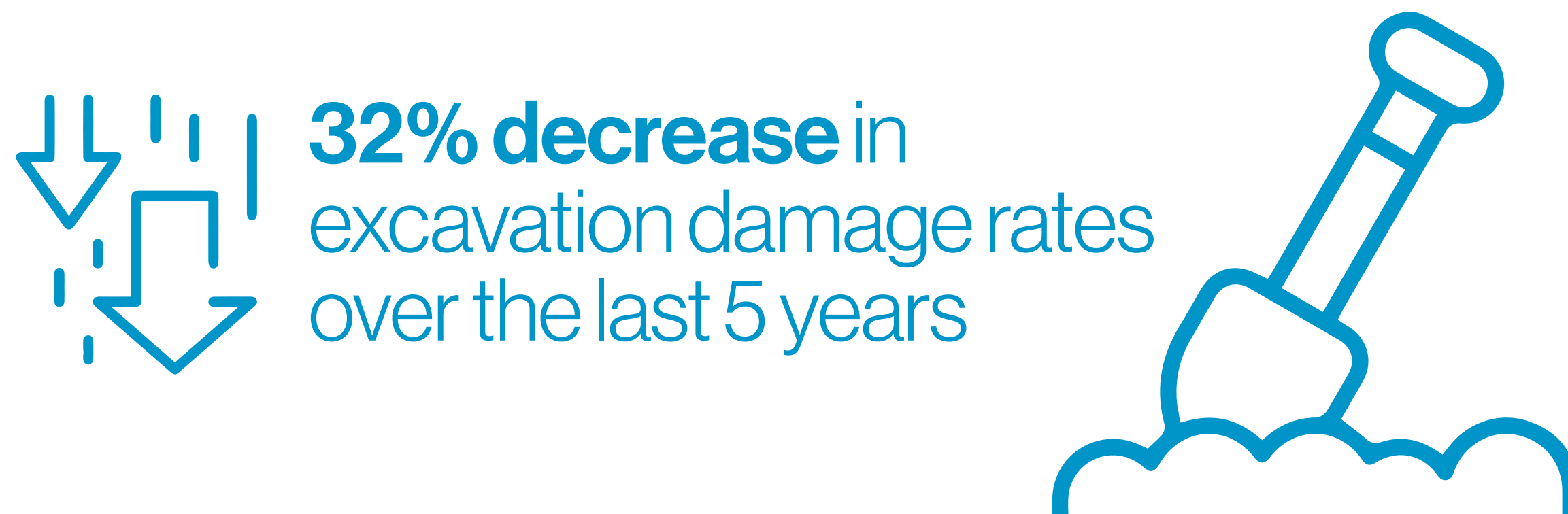
## Gatekeeper Program

National Fuel encourages our employees to act as gatekeepers, as our field personnel encounter hundreds of customers daily and are able to identify unusual or suspicious situations when customers need assistance. Employees are on the lookout for warning signs as they interact with our customers and are encouraged to contact their supervisor if they believe someone requires assistance.

- Unshoveled driveways/walkways
- Snow covered home vents/exhausts
- Mail piling up
- Difficulty paying bills
- Declining condition of home/lawn
- Difficulty seeing, speaking, hearing or moving
- Unattended children or pets



Michael Conway was recognized by the Society of Gas Operators for his heroism and dedication to ensuring public safety in July of 2023. During the course of his meter reading route, Mike came to the rescue of a customer who was trapped under a fallen tree. While remaining situationally aware, he drew from his safety training, ensured the area was safe and lifted the tree high enough for the customer to escape unharmed.





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# Emergency Preparedness and Response

National Fuel is committed to **effective emergency response** to minimize the impacts to our employees, contractors, customers and communities in the event of an emergency.

- ✓ **Our Emergency Response Coordinators hosted more than 45 external emergency response services and government agencies throughout the New York and Pennsylvania Operating Territories**
- ✓ **More than 1,000 firefighters attended free, in-person training with many participating in our fire school where different types of natural gas pipeline fires can be extinguished**
- ✓ **All segments perform in-depth annual incident simulations to practice and assess cross-departmental emergency responses**

<b>Emergency Response Tabletops, Drills, and Training</b>	Involves field operations personnel and management to practice/assess our response procedures, capabilities and share lessons learned
<b>Emergency and Spill Response Plans</b>	Provide site specific information and guide personnel in the event of an emergency
<b>First Responder Outreach</b>	Provides information on our facilities and emphasizes coordination in the event of an emergency
<b>Emergency Response Coordinators</b>	Assist with conducting drills and facilitating communications with local, county and state emergency responders and public officials
<b>Free First Responder and Emergency Management Training</b>	Promotes safe identification of and response to natural gas emergencies
<b>Pipeline Safety Webpage</b>	Offers pipeline safety resources for potential stakeholders and the general public
<b>Dedicated Emergency Hotline</b>	Staffs 24/7 hotline to report gas leaks and emergencies



## 2023 Utility Emergency Response Time

Our Utility is among industry leaders in this area as confirmed by annual industry benchmarking and statewide regulatory performance measure reporting.



**99% of emergency calls responded to within 45 minutes**



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## Emergency Response Drills

The Company prioritizes safety and conducts regular emergency response drills for each operational department. These drills may include collaborating with local emergency management agencies to ensure a well-coordinated and effective response to crisis situations.



Seneca Resources and Midstream Company conduct collaborative emergency response drills to ensure preparedness for any situation.

## Blossburg House Donation – Live Burn Class

In 2023, Highland Field Services donated an unused parcel to the Blossburg Fire Department for firefighter training. The house, located near HFS' water treatment plant, was used for a live burn class for 50 firefighters from surrounding counties.

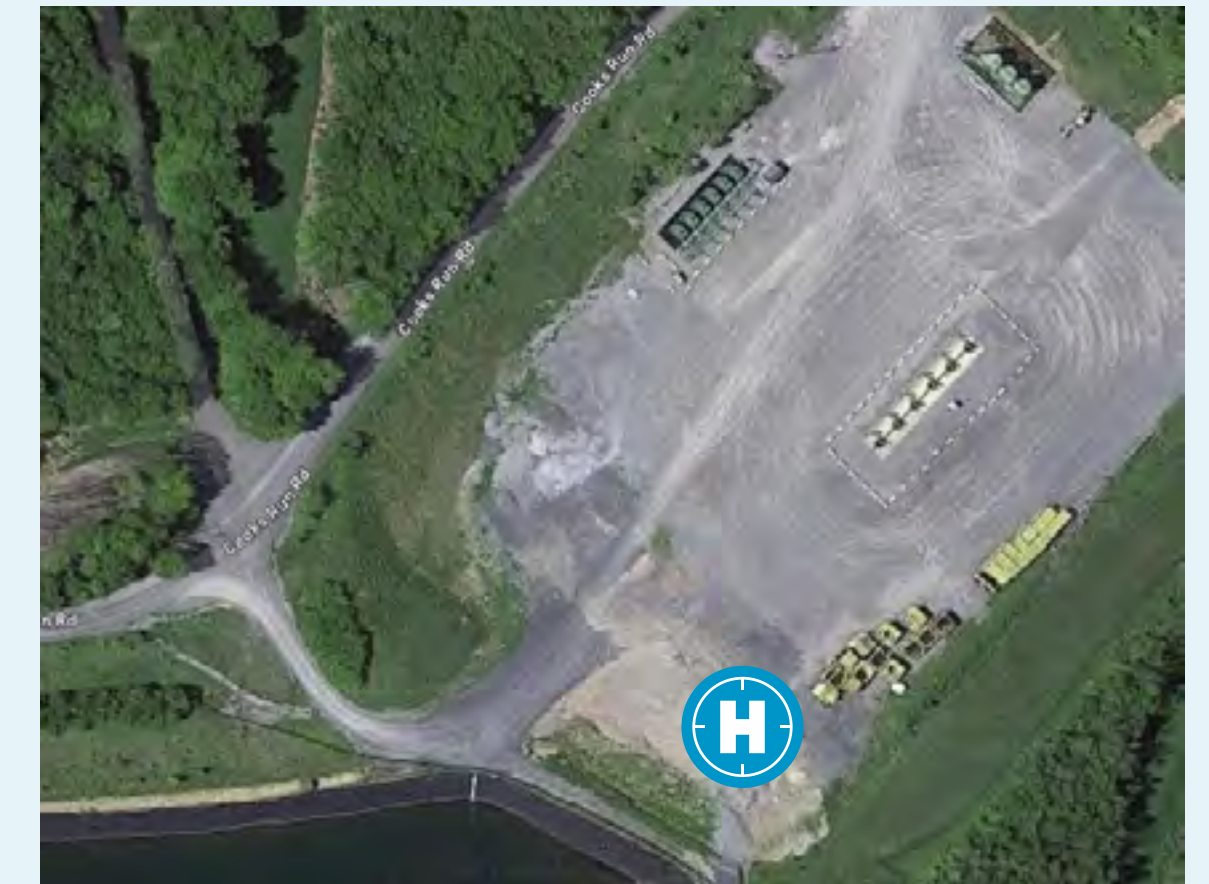


Local firefighters gain hands-on experience and essential safety training during a live burn class in Blossburg, Pennsylvania. The property used for the training was donated by Highland Field Services, Seneca's water management subsidiary.

# Remote Area Emergency Response

## Helicopter Landing Zone

Seneca joined local emergency management agencies to create a medical helicopter landing zone in its Western Development Area in Cameron County, Pennsylvania. The goal is to improve emergency transport and provide rapid medical care for individuals in the Pennsylvania Wilds, highlighting the industry's commitment to community health and safety.



## Remote Area Communication Devices

Supply Corporation purchased more than 100 lone worker devices to improve communication and emergency response for employees performing tasks in remote areas of our system. The devices come equipped with satellite and cellular communications capable of allowing communication to a third-party dispatch center.



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# System Integrity and Safety

## Processes to Identify and Manage Risk

To ensure the safety of our employees, contractors, and communities, we have a robust risk identification and mitigation program in place.

- Hazard Operability and Hazard Identification studies are performed to identify and rank risks and safeguards.
- Job Safety Assessments are performed before tasks are started so that specific hazards and mitigative measures can be identified.
- Simultaneous Operations planning and field reviews are conducted to ensure proper communication and coordination between parties working on the same location at the same time.
- Pre-Startup Safety Reviews are conducted when commissioning a new well pad or facility.
- A Management of Change protocol is in place to evaluate proposed changes and verify that no new hazards are being introduced.
- Regulatory compliance program includes tracking new rules, updating procedures and compliance requirements, and reviewing enforcement actions issued by the Company's state and federal regulators to similarly-situated peers in the territories where the Company's segments operate.

## Integrity of Gas Delivery Infrastructure

National Fuel's inspection and maintenance efforts are designed to meet or exceed safety requirements and we continue to make significant investments to improve the safe operation of our systems. Corrosion, together with manufacturing and construction related defects often associated with early vintage pipelines, are leading causes of significant pipeline incidents. Our System Modernization Programs are designed to identify and evaluate system threats or concerns, and prioritize replacement that provides:

- Enhanced system reliability and safety
- Construction, operations and maintenance efficiencies
- Annual GHG emissions reductions
- Optimization of capital expenditures on larger scope projects with better economies of scale

## Downstream Segment System Modernization:

- Maximizes replacement with medium-pressure pipe installation to reduce pipe diameter size, which allows insertion of new medium pressure plastic mains into the larger low-pressure bare steel, cast iron and wrought iron mains being retired. This reduces excavation and restoration costs, and future excavation damage to plastic mains. An additional benefit to expanding the medium pressure system is the relocation of gas meters to the outside of homes and businesses for improved safety and easier operation and maintenance.

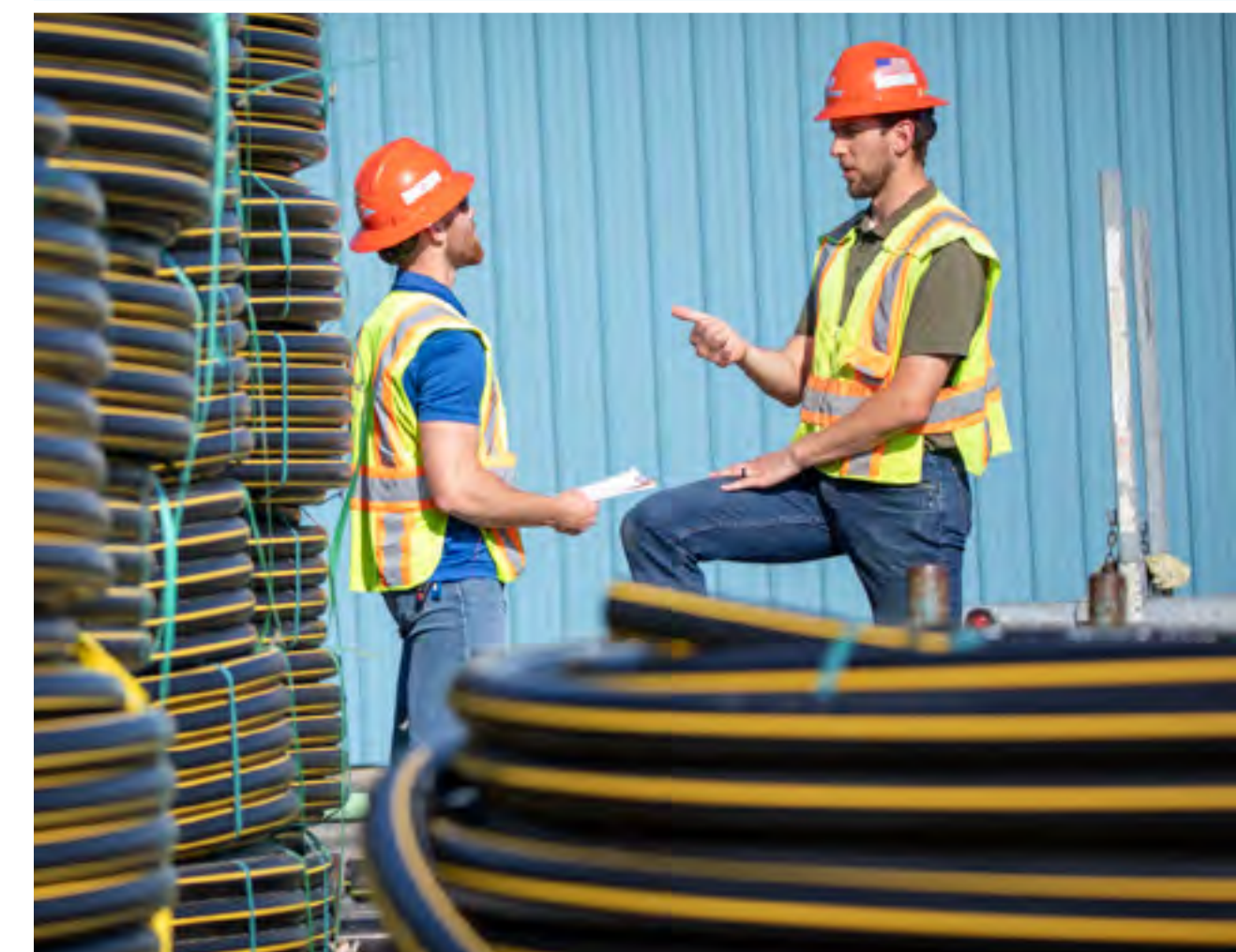
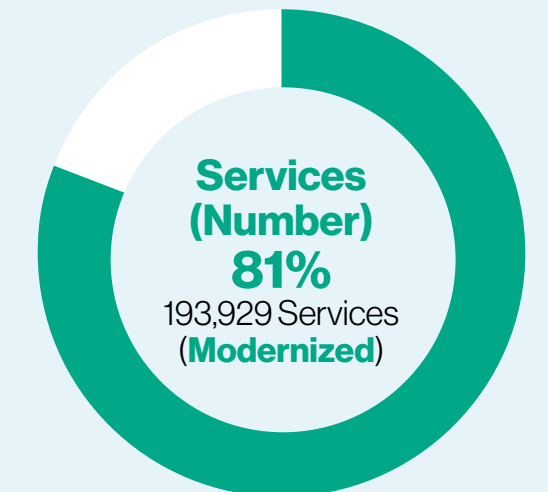
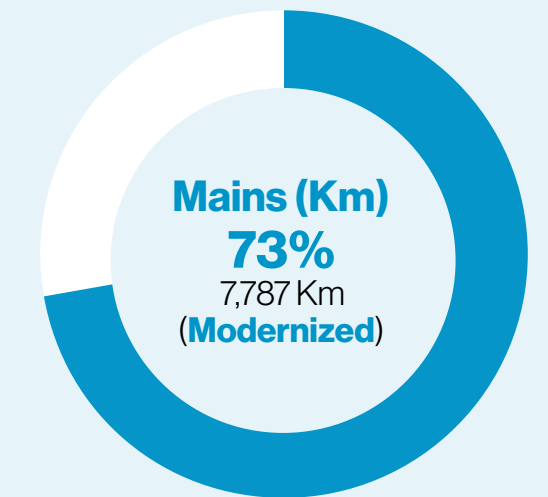
- Over the past five years, Distribution Corporation has **invested more than \$420 million** in the safety of our utility pipeline network, including system modernization.
- The Company does not have any known cast iron mains. The last remaining cast iron in New York was replaced in 2023.

## Midstream Segment System Modernization:

- To reduce the risk associated with early vintage pipelines, the Midstream Segment has committed to the ongoing modernization of older bare steel pipelines, especially those pipelines operating at higher pressures in populated areas.
- Over the past five years, the Midstream Segment has **invested more than \$527 million**, improving system safety and reliability. This is expected to remain a continued focus for the Company in the years to come.
- Advancement of composite pipe technology and installations in recent years have proven to be a cost efficient and environmentally friendly means of system modernization, with insertion of the composite pipe into existing vintage bare steel pipelines allowing for reduced earth disturbance, reduced impacts to water resources and reduced capital costs.
- Since 2016 our Gas Storage Group has used its Storage Integrity Management Plan to assess and mitigate risk for the 1100+ underground storage wells in our system.

## Downstream System Modernization Progress

Bare Steel, Cast Iron and Wrought Iron Pipe Reduction since 1990





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# Leak Management

An effective leak management program improves system safety and reduces GHG emissions.

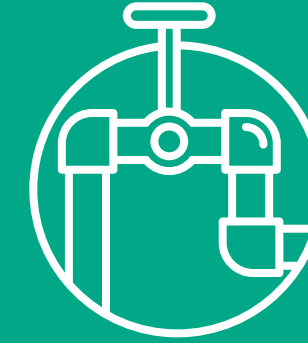


## Downstream Segment Leak Management Program

- Prompt identification of leaks, conditions that may lead to leaks or other unintentional releases of natural gas from pipeline facilities
- Rapid response to emergencies and a thorough onsite investigation
- Accelerated leak surveys exceeding regulatory requirements that target facilities with a higher potential to leak or that have potentially higher consequences should a leak occur
- Comprehensive leak classification and repair procedures for above ground and below ground leaks
- Plastic system integrity program that targets leaking plastic facilities for additional accelerated actions to prevent future leaks
- Robust damage prevention program to minimize large volume leaks caused by excavation
- System modernization program and annual targets to replace leak prone mains and services
- Annual leak backlog goals to drive year-over-year improvement, which are also tied to annual executive compensation goals

**Utility Leak Management Program**  
Calendar Year-End 2019 – 2023

 **74.8% reduction**  
in year-end outstanding leaks



## Midstream Segment Leak Patrol and Surveillance Program

- Regular foot and aerial patrols are conducted to look for indication of leakage and to identify any population growth or third-party encroachments along pipeline corridors
- Additional patrolling conducted after severe weather events to evaluate rights-of-way conditions for erosion or land subsidence that could impact pipeline integrity or environmental resources
- Evaluates and participates in industry projects to assess viability of new technologies that may assist or enhance monitoring through use of satellite imagery and data



## Upstream Segment Leak Management Program

- Routine operator visits and inspections of well pad facilities
- Monthly AVO inspections of all facilities
- OGI cameras are used to conduct quarterly LDAR surveys of all well pads and facilities
- Aerial gas mapping Light Detection and Ranging (LiDAR) surveys to detect, locate, and quantify methane emissions
- Standard pad design with lower explosive limit (LEL) and ultrasonic leak detectors to automatically shut in the pad if a leak is detected
- Piloting continuous emissions monitors on three well pads to detect and quantify methane



**39% reduction** in  
fugitive emissions  
from 2022 to 2023





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## Safety Management Systems

### Pipeline Safety Management System (PSMS)

Our Downstream and Midstream Segments' PSMS is modeled after the American Petroleum Institute Recommended Practice 1173 (API RP 1173), Pipeline Safety Management Systems. It provides a framework for and builds upon existing programs and practices to keep everyone safe and prevent pipeline incidents by promoting safety awareness and continuous improvement of our processes, procedures, performance and safety culture.

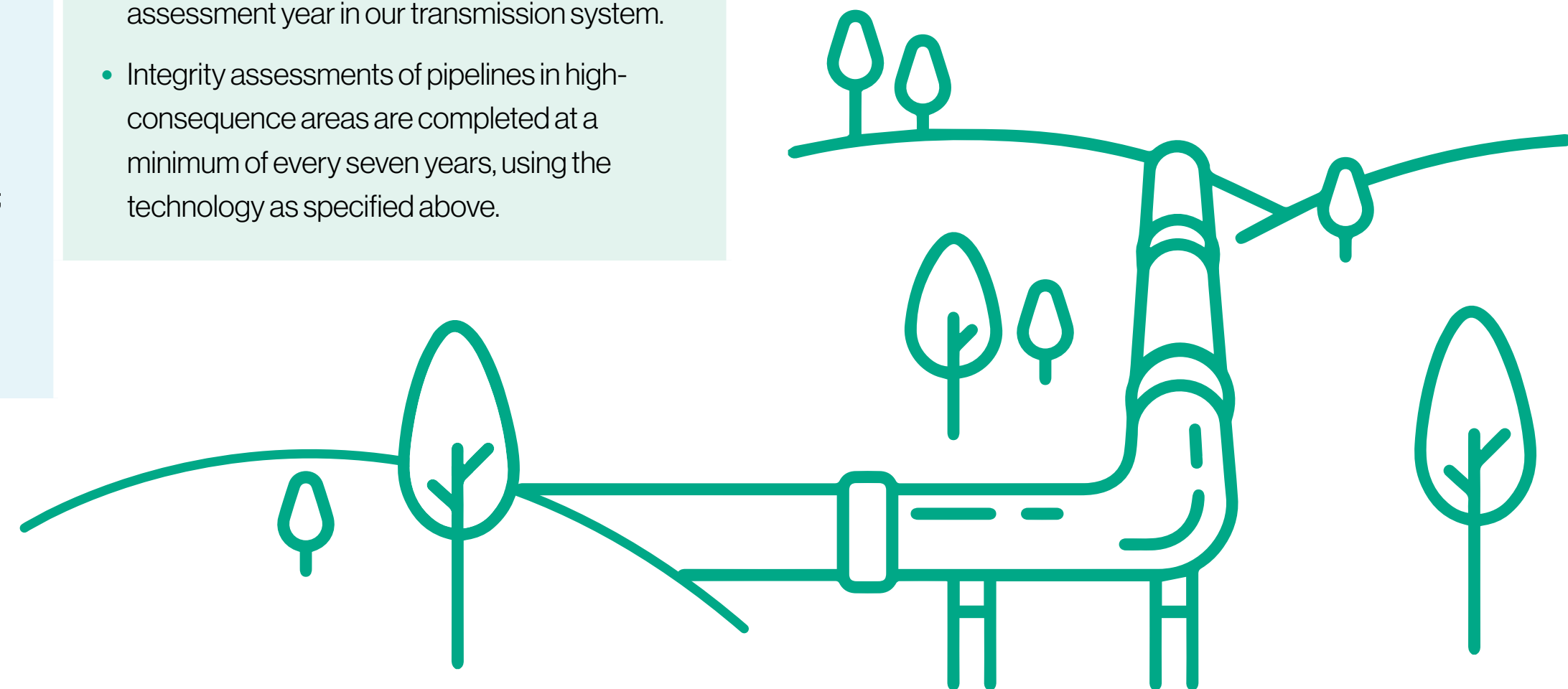
### Seneca's Integrated Management System (IMS)

Seneca's IMS is modeled after ISO Standards, Equitable Origin's EO100™ Standard for Responsible Energy Development and the International Finance Corporation Performance Standards. Although Seneca does not formally participate in or apply for certification in ISO 14001 (Environmental Management), or ISO 45001 (Occupational Health & Safety Management), those frameworks are used as the foundation for creating a complete management system for our upstream operations. Seneca also has a set of BMPs for critical operations such as containment construction and flowback operations.



## Inspection and Maintenance Programs

Pipeline Programs	Integrity Assessment Inspection Methods and Technology	Upstream Segment Well Pad Programs
<ul style="list-style-type: none"> <li>• Quarterly, semi-annual and annual pipeline patrols;</li> <li>• Leakage surveys, including business district, public buildings and frost surveys, as well as additional targeted risk-based quarterly and semi-annual leak surveys;</li> <li>• Monthly leak surveys of schools, hospitals and nursing homes;</li> <li>• Annual regulator and valve inspections;</li> <li>• Annual pressure regulating station inspections;</li> <li>• Continuous SCADA and remote monitoring of operating pressures;</li> <li>• Atmospheric corrosion inspections;</li> <li>• Odorant inspections;</li> <li>• Bi-monthly and annual cathodic protection monitoring;</li> <li>• Annual emergency valve inspections;</li> <li>• Underwater inspections of waterbody crossings;</li> <li>• Incident investigation and root cause analysis; and</li> <li>• Plastic system leak analysis and remediation program.</li> </ul>	<ul style="list-style-type: none"> <li>• In-Line Inspection (ILI) utilizes "smart pigs" that are propelled through the pipeline using gas pressure, air pressure or a robotic propulsion to detect wall thickness, dents, internal and external metal loss, cracks and crack-like features and manufacturing defects.</li> <li>• Pressurized water (hydrotest) is used at a pressure of at least 1.5 times the maximum allowable operating pressure of the pipeline for a period of at least 8 hours.</li> <li>• Direct assessment that uses specialized tools to identify potential coating defects that could result in corrosion, which are then excavated, examined and repaired as required.</li> <li>• Expanding pipeline assessments through the use of modern technology smart pigs. The Company leveraged crack detection technology for the first time during the 2023 assessment year in our transmission system.</li> <li>• Integrity assessments of pipelines in high-consequence areas are completed at a minimum of every seven years, using the technology as specified above.</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterly documented mechanical integrity inspections;</li> <li>• Monthly AVO inspections;</li> <li>• Bi or tri- annual greasing program of production trees;</li> <li>• Painting of equipment to prevent corrosion;</li> <li>• Testing of pressure relief valves;</li> <li>• Annual calibration and testing of lower explosive limit detectors;</li> <li>• Plunger/bottom hole assembly inspections;</li> <li>• Fuel meter calibrations and oil changes; and</li> <li>• Annual cleaning and calibrations of thermoelectric generators.</li> </ul>

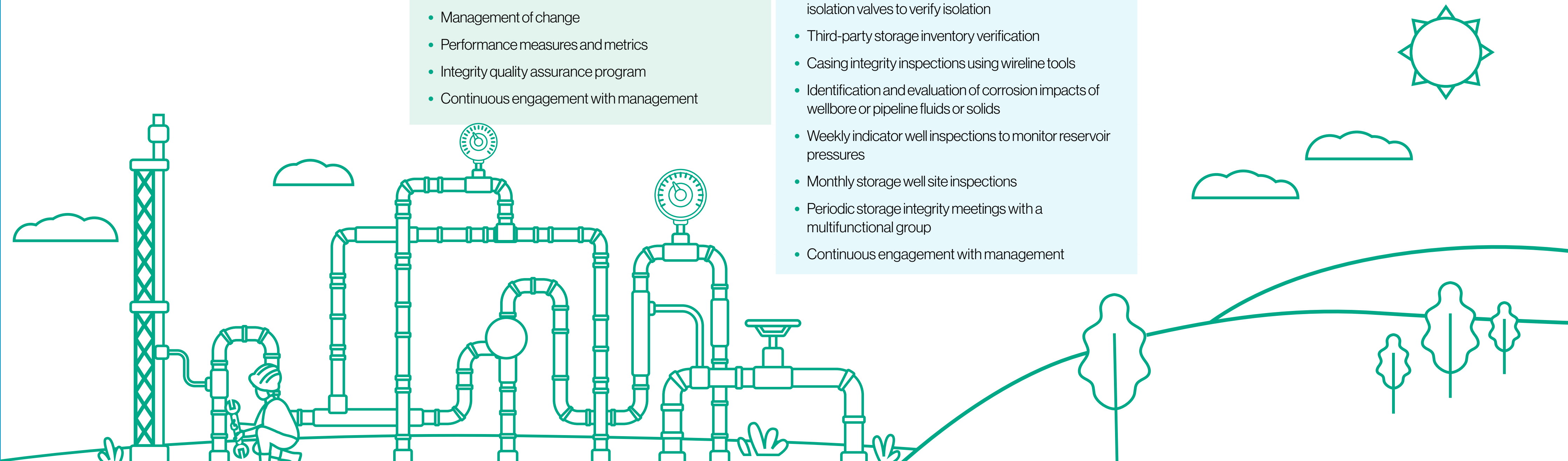




## Integrity Management Programs

National Fuel's integrity management programs improve system safety through identifying, assessing and prioritizing risks to our pipeline systems and storage fields. These programs, in addition to our robust compliance programs, help the Company address risks to our systems and implement proactive safety measures.

Distribution Integrity Management Program	Transmission Integrity Management Program	Storage Integrity Management Program	Well Plugging and Decommissioning Program
<ul style="list-style-type: none"> <li>• Threat identification process</li> <li>• Risk analysis and prioritization</li> <li>• System knowledge</li> <li>• Safety and risk reduction measures</li> <li>• Performance measures and metrics</li> <li>• Program data analysis</li> <li>• Management of change</li> <li>• Overall program evaluation and improvement</li> <li>• Continuous engagement with management</li> </ul>	<ul style="list-style-type: none"> <li>• Threat identification process</li> <li>• Risk analysis and prioritization</li> <li>• Roles and responsibilities</li> <li>• High consequence area identification</li> <li>• Pipeline integrity assessment method selection</li> <li>• Assessment plan</li> <li>• Conducting assessments</li> <li>• Remediation of threats</li> <li>• Preventive and mitigative measures</li> <li>• Continual evaluation and reassessment</li> <li>• Management of change</li> <li>• Performance measures and metrics</li> <li>• Integrity quality assurance program</li> <li>• Continuous engagement with management</li> </ul>	<ul style="list-style-type: none"> <li>• Threat identification process</li> <li>• Risk analysis and prioritization</li> <li>• Performance measures and metrics</li> <li>• Program data analysis</li> <li>• Overall program evaluation and improvement</li> <li>• Wellhead safety zone characterization</li> <li>• Annual wellhead and wellsite inspections</li> <li>• Continual evaluation and reassessment</li> <li>• Management of change</li> <li>• Annual function testing of master gate and pipeline isolation valves to verify isolation</li> <li>• Third-party storage inventory verification</li> <li>• Casing integrity inspections using wireline tools</li> <li>• Identification and evaluation of corrosion impacts of wellbore or pipeline fluids or solids</li> <li>• Weekly indicator well inspections to monitor reservoir pressures</li> <li>• Monthly storage well site inspections</li> <li>• Periodic storage integrity meetings with a multifunctional group</li> <li>• Continuous engagement with management</li> </ul>	<ul style="list-style-type: none"> <li>• Threat identification process</li> <li>• Risk analysis and prioritization</li> <li>• Assurance of proper plugging with cement to permanently prevent the release of gas from the storage reservoir</li> <li>• Post plugging annual vent inspections</li> <li>• Continuous engagement with management</li> </ul>



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## Facility Design and Construction Management

National Fuel maintains a robust design and construction management program. Our Downstream and Midstream segments utilize an engineering design and approval process to ensure the design of pipelines and facilities meet or exceed PHMSA's gas safety regulations and all applicable standards.

### Facility Design and Construction Management Major Elements

- Engineering design manual for steel facilities;
- Engineering design approvals process for new or replacement facilities;
- Construction inspection training program for all inspectors;
- Construction Inspector Manual;
- Design and Construction Specifications and Procedures;
- All steel transmission facility inspectors certified to API 1169;
- American Weld Society Certified Welding Inspection (CWI) training and certification for select individuals;
- North American Corrosion Engineers (NACE) certified Coating Inspector Program (CIP) for select individuals;
- Design and testing protocols for remote control valve installations;
- Construction Quality Management System including internal construction audits/assessments, non-conformance reporting and lessons learned process for continuous improvement;
- Periodic audits of radiography and other non-destructive examination procedures and results by third parties;
- Geohazard analysis and mitigation measures implemented during design and construction phases for new transmission facilities in landslide prone areas. Consultants with civil engineering and geotechnical expertise are under contract to provide these services for initial design as well as for post construction short notice "on-call" mitigation;
- Complete required destructive and in-service material verification tests to obtain unknown or unconfirmed material properties for a given pipeline segment that ensures design calculations are accurate, complete and support pipeline operating pressures;
- Pre-construction planning checklist to ensure personnel qualifications and adherence to project specific commissioning and abandonment plan; and
- Comprehensive commissioning and start-up procedures.





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# Our People

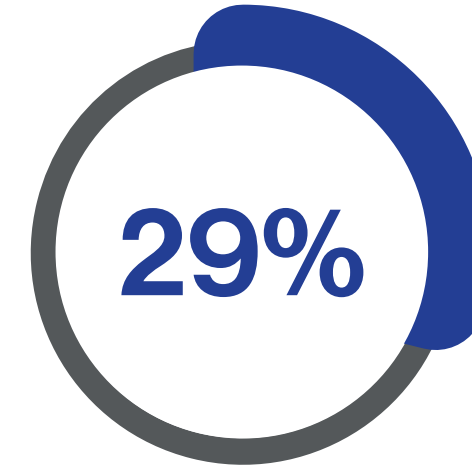
**The ongoing success of National Fuel is the direct result of our employees' hard work and dedication.**

We value our employees' diverse perspectives and we are united in our commitment to provide an essential service to our communities and customers.

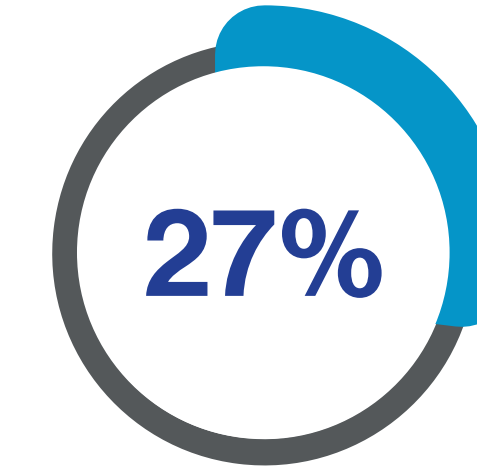


National Fuel has approximately **2,290 employees** across its New York, Pennsylvania and Texas locations. To best serve our stakeholders, the Company strives to build a highly skilled and effective team that reflects a diversity of experience and backgrounds.

## 2023 Workforce Summary Highlights



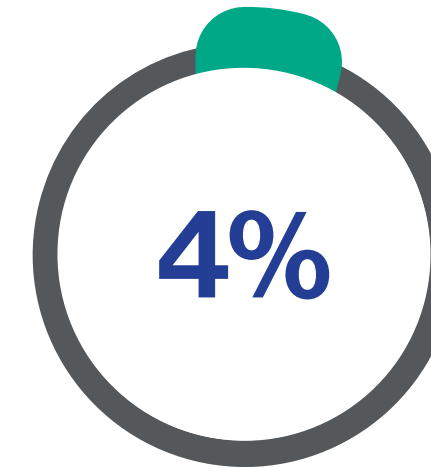
**Diverse Executive and Senior Level Officials<sup>1</sup>**



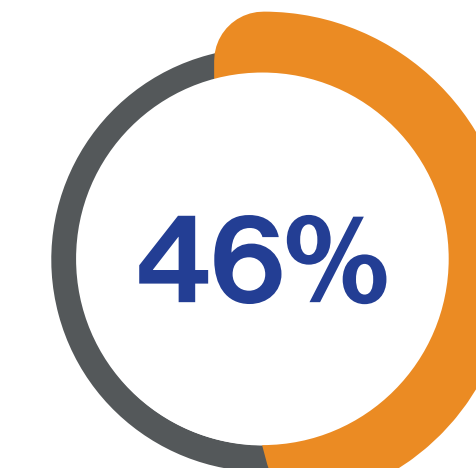
**Females**



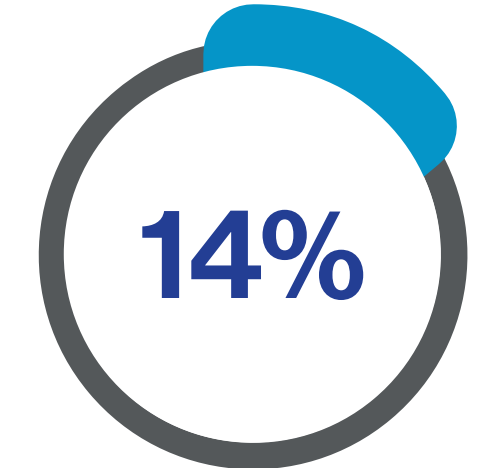
**Racially/Ethnically Diverse**



**Veterans**



**Employees Covered by Collective Bargaining Agreements**



**2023 New Hires Racially/Ethnically Diverse**

## Investing in Our Employees

- ✓ Ongoing Employee Engagement
- ✓ Career and Leadership Development Opportunities
- ✓ Competitive Compensation and Benefits Packages
- ✓ Prioritization of Employee Safety and Wellness
- ✓ Community Involvement and Volunteerism Encouraged
- ✓ Company Supported Employee Resource Groups

<sup>1</sup> Includes gender diverse, racially/ethnically diverse, and disabled employees within reporting category. Executive/Senior Level Officials EEO-1 reporting category includes executives, general managers, and other senior professionals.

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# Employee Attraction and Retention

The Company aims to attract the best employees and to retain those employees by offering **competitive benefits and compensation packages**, as well as career development and training opportunities.<sup>1</sup> The Company also prioritizes employee safety and wellness, including improving employee work-life balance, and creating a **safe, inclusive and productive work environment** for everyone.



**Participation in Employee Engagement Survey<sup>2</sup>**

<sup>1</sup> Our benefits packages and career development opportunities may vary depending on type of employee (e.g., full-time versus part-time, salaried versus hourly, union versus non-union), date of hire and/or position.  
<sup>2</sup> Engagement survey recipients included salaried and non-union hourly employees in the Downstream and Midstream Segments.  
<sup>3</sup> Company will pay differential of full pay less military pay for up to two weeks per year so employee experiences no loss of income for full-time employees.

Healthcare Benefits	Financial Benefits	Insurance Benefits
<ul style="list-style-type: none"> <li>• Medical and prescription drug</li> <li>• Dental</li> <li>• Vision</li> <li>• Inclusive fertility coverage</li> <li>• LGBTQ+ benefits guide</li> </ul>	<ul style="list-style-type: none"> <li>• 401(k) with matching company contribution – including a Roth 401(k) Investment option</li> <li>• Company-funded retirement savings account</li> <li>• Annual variable cash bonus program for salaried employees</li> <li>• Flexible spending account for medical care reimbursement, daycare expenses, adoption expenses</li> <li>• Employee referral bonus program</li> </ul>	<ul style="list-style-type: none"> <li>• Life insurance</li> <li>• Accidental death and disability</li> <li>• Short-term disability</li> <li>• Long-term disability</li> <li>• Optional life insurance</li> <li>• Business travel accident</li> </ul>
Lifestyle Benefits	Career Development and Training	Community Involvement Encouraged
<ul style="list-style-type: none"> <li>• Hybrid in-office/ remote work options, where feasible</li> <li>• Paid time off (“PTO”)</li> <li>• Alternative compressed work schedules</li> <li>• Flex hours</li> <li>• Family and medical leave (includes parental leave)</li> <li>• Lactation friendly workplace</li> <li>• Professional part-time employment track</li> <li>• “Dress for Your Day”</li> <li>• Paid bereavement leave (including pregnancy loss)</li> <li>• Mental health and wellbeing mobile app that includes free employee therapy benefit</li> </ul>	<ul style="list-style-type: none"> <li>• Tuition aid program</li> <li>• Sponsorship for professional licensing</li> <li>• Corporate and technical training programs</li> <li>• Continuous talent review and succession planning</li> <li>• Professional development and cross-training discussions encouraged through annual performance reviews</li> <li>• Annual career development discussions with leadership team</li> </ul>	<ul style="list-style-type: none"> <li>• Days of Doing corporate community service events during work hours</li> <li>• Faces of Fuel and Seneca Serves volunteer programs</li> <li>• Matching charitable giving program</li> <li>• Employee Resource Groups</li> <li>• Paid military leave<sup>3</sup></li> </ul>



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# Diversity, Equity and Inclusion

## National Fuel is committed to hiring and developing qualified individuals who can enhance and contribute to the diversity of our workforce.

Fostering a culture where employees feel like they belong and are empowered to share ideas provides opportunities to gain new perspectives and solutions to help the Company succeed.

**Diversity:** A blending of perspectives, experiences and identities within our teams.

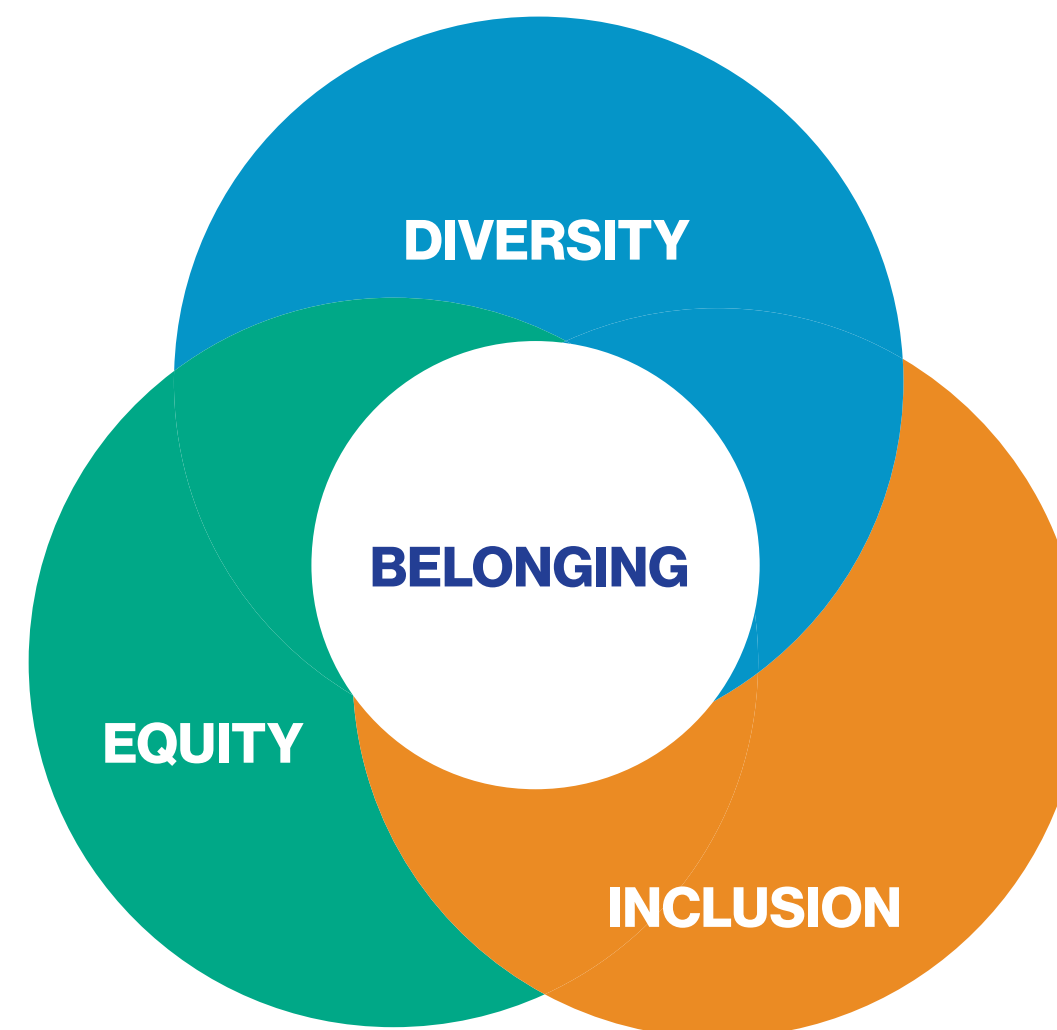
**Equity:** Providing employees access to the same career development opportunities and resources so that all team members have opportunities for success, regardless of social factors.

**Inclusion:** Fostering collaborative and productive work environments that equally value contributions from employees with diverse experiences and ideas.

## Inclusion Commitment Reinforced Through Policies and Postings

To address the social risks inherent in any workplace, the Company has developed a robust compliance program and set of policies. These policies are designed to create a safe, inclusive and productive work environment, and reinforce our commitment to workplace inclusion.

- **Employee Handbook Policies:** Includes equal employment opportunity commitments, nondiscrimination and anti-harassment disclosures that communicate the Company's expectations with respect to maintaining a professional workplace free of harassment.



- **Nondiscrimination and Anti-Harassment Policy:** Prohibits discrimination or harassment against any employee or applicant based on sex, race/ethnicity or the other protected categories. This policy is sent to employees annually through the employee survey and attestation process.
- **Labor and Human Rights Policy:** Guided by the International Labor Organization's (ILO) core labor principles concerning nondiscrimination, freedom of association and collective bargaining, forced labor and underage workers in the workplace. The Company also includes information with respect to grievance reporting.
- **Supplier Code of Conduct Policy:** Reinforces expectation that suppliers uphold Labor and Human Rights Policy, follow environmental, health and safety standards and comply with anti-corruption expectations when transacting business with the Company.
- **Executive Support:** Annually, the Chief Executive Officer reinforces the Company's commitment to equal employment opportunity by signing a corporate Nondiscrimination and Anti-Harassment Policy and an Equal Employment Opportunity (EEO) Policy Statement. Both policies are then displayed at all Company locations, included in all employee handbooks and discussed with all new hires during their onboarding process.

- **Inclusive Job Postings:** Written to attract the widest range of candidates. Requirements focus on removing barriers and providing a pathway to all qualified candidates by using gender neutral language, clear job competencies, pay ranges and the Company's diversity statement.

## Raising Awareness Through Training

- **Harassment & Discrimination Prevention Training:** Educates on, and reinforces a commitment to, a harassment-free workplace, which is further supported through regular communication of policies prohibiting discriminatory practices.
- **Unconscious Bias Training:** Educates on social stereotypes that individuals form outside their own conscious awareness and encourages employees to recognize and evaluate their own unconscious biases and how they might impact work environments.
- **Manager Bias Training Prior to Performance Appraisal Process:** Continuing education for managers to ensure that opportunities within teams are consistent and fair and evaluate processes for biases or inequities – conscious or unconscious.

1 The Company's Nondiscrimination and Anti-Harassment Policy lists the following protected categories: age, race, creed or religion, color, national origin, sexual orientation, gender identity or expression, military or veteran status, sex or gender (including pregnancy, childbirth or related conditions), disability, predisposing genetic characteristics, familial status, marital status, status as a victim of domestic violence, and employee or dependent's reproductive health decision making.



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### Pay Equity

National Fuel continuously focuses on providing pay equity for all employees. As part of this focus, we have implemented the following practices:

- Salary history is not requested from job applicants so as to prevent perpetuating prior pay disparity.
- Human Resources conducts a comprehensive pay analysis for each new hire, which includes an internal equity review for those performing similar functions.
- An external consultant provides regular benchmark salary data for job functions.
- Annual salary increases and promotion recommendations are reviewed within HR and then through senior leadership to ensure equity and consistency across business units.

### Community Outreach Focused on Diverse Recruitment

National Fuel aims to cast a wide net of potential candidates to ensure we are considering all qualified individuals. We collaborate with community groups and organizations to help promote awareness of job opportunities within diverse communities and hope to build on this trend with the following initiatives.

#### Participate in community outreach events

to educate job seekers about our commitment to diverse employee representation.

#### Meter Reader Intern-in-Training Program:

Onsite paid summer internship program for high school students with professional development workshops. The Company provides wraparound services such as drivers' education and transportation to work locations for program participants. Students are exposed to different job opportunities within the Operations department and learn about different career paths within the gas utility. Program graduates are equipped to start a career in the gas utility following program completion, and can be eligible to receive an offer of full-time employment following their high school graduation.

#### Corporate Partner for "Say Yes" Apprenticeship Program:

Post-graduation program that connects City of Buffalo students to career pathways through work-based learning. The students attend a 2-year college, taking classes that align with their job training. The Company provides them with valuable hands-on experience and access to a sustainable wage while learning. In 2024, the Company will bring on four apprentices in various departments.

# Building a Talent Pipeline through Leadership Programs

National Fuel is committed to providing our employees with the career development tools and resources to solve future industry challenges and deliver on our customer commitments. In addition to the work experiences and career development and feedback we provide internally, the Company also sponsors and nominates employees to participate in five different area leadership programs.

#### Program participation aims to:

- Encourage employees to assess and develop their own professional skill sets
- Engage with our communities
- Help the Company identify potential leadership talent

**Equitable Representation in Leadership Programs:** Since 2021, diverse employee participation in these programs has surpassed our diverse salaried-employee representation, which illustrates the Company's commitment to including diversity in our leadership pipelines.







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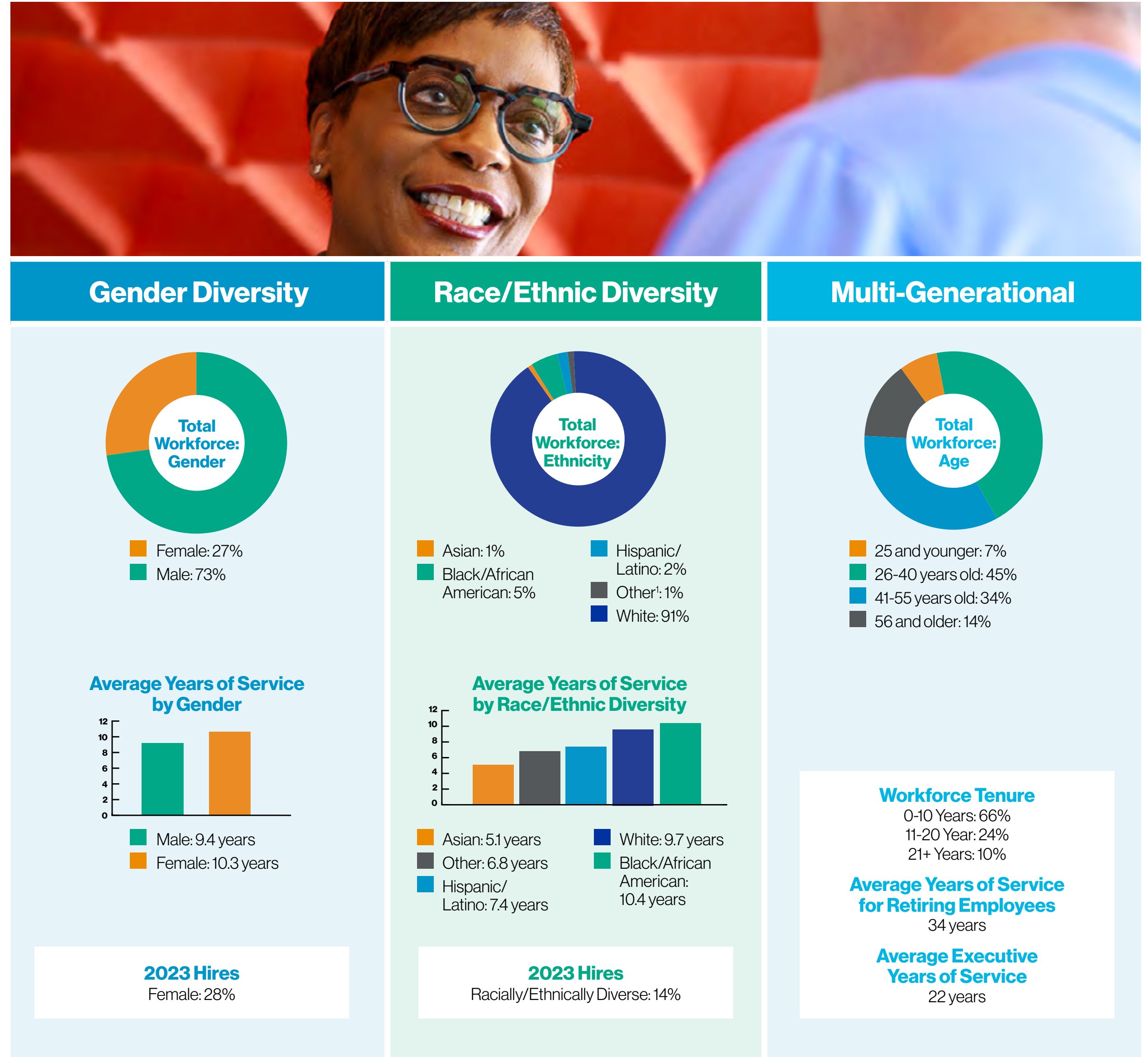
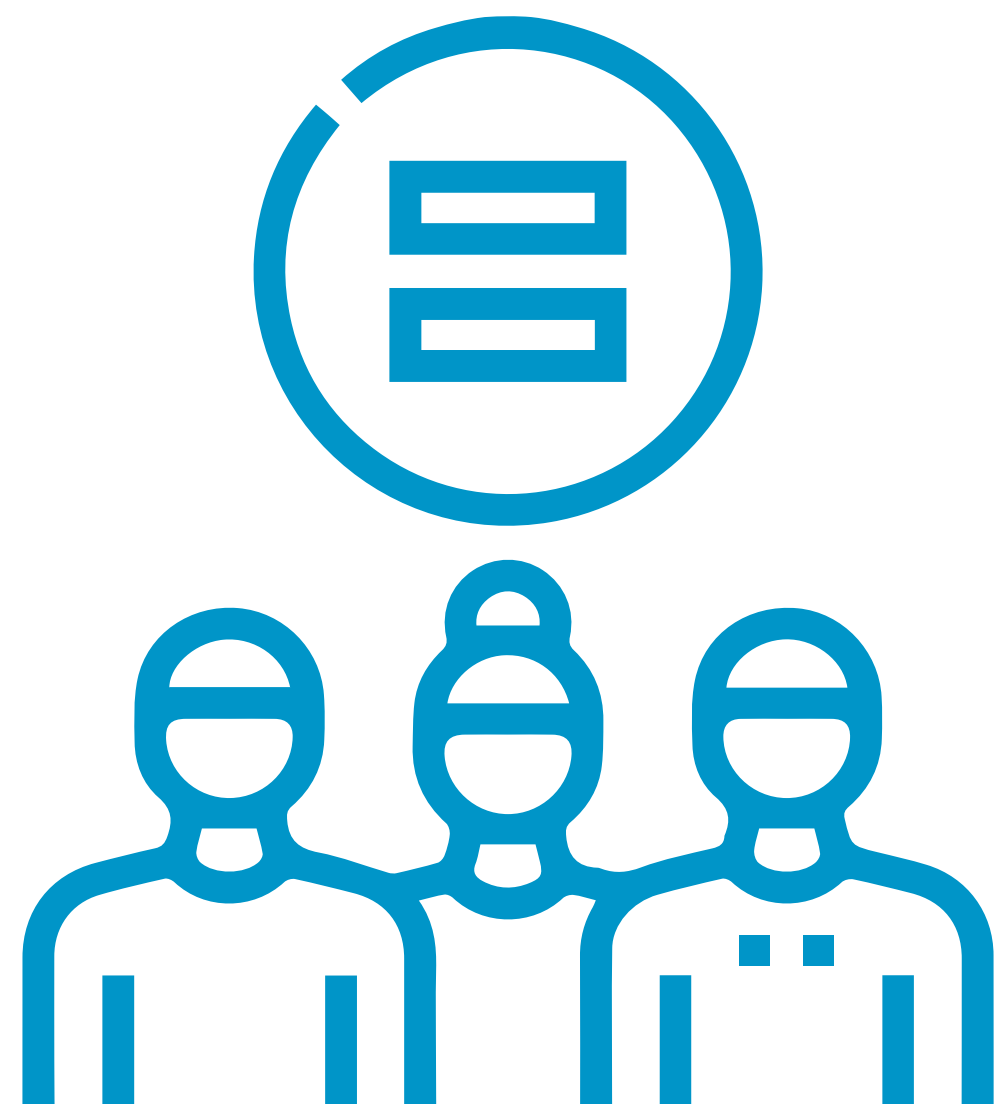
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# Employee Demographics

To further our commitment to diversity and our guiding principle of transparency, National Fuel tracks diversity indicators and shares that demographic data within this Report. This demographic data provides a key snapshot of our progress on increasing representation and helps us identify opportunities to do better, and continue **embracing diversity and inclusion** within our organization.



<sup>1</sup> Other includes the following classifications: Native American or Alaska Native, Native Hawaiian or Pacific Islander, and Two or More Races.



# Building an Inclusive Workplace

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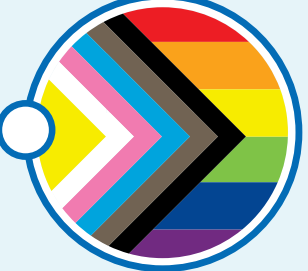
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Employee Engagement	Inclusive Onboarding Experience	Corporate Equality Index	Support for Unionized Workforce				
<p>National Fuel values each employee's perspectives and experiences. We understand that ongoing employee engagement helps us learn about our strengths, as well as improvement opportunities to support our teams and continue to be responsive to employee feedback.</p> <p style="text-align: center;"><b>2023 Employee Engagement Survey<sup>1</sup></b> <b>87% Employee Participation</b></p> <ul style="list-style-type: none"> <li>✓ <b>94%</b> agree that their co-workers treat them with respect</li> <li>✓ <b>84%</b> agree their supervisor makes them feel like a valuable team member</li> <li>✓ <b>83%</b> agree that they are managed in a way that is supportive</li> <li>✓ <b>80%</b> agree that they are trained and well prepared for their role</li> <li>✓ <b>78%</b> agree that they would like to work at National Fuel for their whole career</li> </ul>	<p><b>Self-Identification:</b> Strengthening our culture of belonging means creating opportunities for our workforce to feel seen and included. We offer employees the choice to self-identify within specific demographic categories to better understand and support the diversity of our workforce. During the application process, employees have the option to confidentially share personal information across a range of both inherent and non-visible dimensions of diversity including:</p> <ul style="list-style-type: none"> <li>• Gender</li> <li>• Race/Ethnicity</li> <li>• Disability status</li> <li>• Veteran status</li> <li>• Sexual Orientation<sup>2</sup></li> </ul> <p><b>Promoting Employee Resource Groups:</b> New employees are made aware of our resource groups and how they can get involved.</p> <p><b>Inclusive Benefits Review:</b> Benefit options provided to new employees including family leave options (regardless of gender), and our LGBTQ+ benefits guide.</p>	<p>The Corporate Equality Index is a national benchmarking tool on corporate policies, practices and benefits pertinent to the LGBTQ+ community. With the help of PrideFuel, the Company submitted information for the first time, and received full points for our employment nondiscrimination practices, transgender inclusive benefits, LGBTQ+ benefits guide, internal training procedures, LGBTQ+ data collection, transgender workplace best practices, ERGs and outreach and engagement with the LGBTQ+ community.</p> <div style="text-align: center;">  <p><b>PrideFuel &amp; Allies</b></p> </div>	<p>National Fuel respects its employees' rights to self-organization: to form, join or assist labor organizations, to bargain collectively through representatives of their own choosing, and to engage in other concerted activities for the purpose of collective bargaining or other mutual aid or protection, as well as their right to refrain from any or all such activities, without fear of reprisal, intimidation or harassment. During calendar year 2023, National Fuel did not incur any work stoppages (strikes or lockouts) and therefore experienced zero idle days for the year.</p> <p style="text-align: center;"><b>Employees Covered Under Collective Bargaining Agreements</b></p> <div style="text-align: center;"> <table border="1"> <tr> <td style="background-color: #0070C0; color: white; padding: 5px;"><b>46%</b></td> <td style="background-color: #00A651; color: white; padding: 5px;"><b>54%</b></td> </tr> <tr> <td style="text-align: center; font-size: small;">Union</td> <td style="text-align: center; font-size: small;">Non-Union</td> </tr> </table> </div>	<b>46%</b>	<b>54%</b>	Union	Non-Union
<b>46%</b>	<b>54%</b>						
Union	Non-Union						

<sup>1</sup> 2023 Employee Engagement Survey was open to salaried and non-union hourly employees in our Downstream and Midstream Segments.  
<sup>2</sup> Self-identification of sexual orientation is only listed within our Pennsylvania application process.



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# Employee Resource Groups

Our four employee resource groups (ERGs) are voluntary, employee-led and are comprised of individuals who self-identify based on specific backgrounds, interests and/or demographic factors. The groups provide employees an opportunity for professional development, networking, mentoring, allyship and community involvement. The ERGs also serve as a vehicle for employees to communicate their perspectives and requests directly to senior management, with an executive sponsor for each group and a bi-annual meeting with the senior executive team.



## EDGEFuel

- Black Business Market
- Career Journey Seminars
- Community and Youth Engagement
- Prom Dress Giveaways
- 5/14 Remembrance



## FEMALEFuel

- Communication Skills Workshop
- Career Success Panels
- Golf Skill Clinic
- Walking Wednesdays
- Fuel the Stretch



## PrideFuel&Allies

- LGBTQ+ Benefits
- Corporate Equality Assessment
- Buffalo Pride Parade
- Erie Pride Parade



## VetFuel

- Buffalo-Niagara Honor Flight
- Mail Call Program
- Raising of the Colors
- Regional Leaders throughout the Company
- Fundraiser for Buffalo & Erie County Military & Naval Park



<sup>1</sup> 2023 participation rates provided based on self-identified demographic data and do not include allies. Total participation rates for PrideFuel, the Company's LGBTQ+ ERG, are not provided because LGBTQ+ employees may choose to self-identify on a voluntary basis, so the entire potential population is data deficient.





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# Our Partners

**Improving supplier diversity** is an integral part of our commitment to promoting a more diverse environment and **reflecting and supporting the communities we serve.**

National Fuel continues to update the Company's database of active suppliers, to track supplier diversity statuses.

The Company furthers its commitment to supplier diversity through the following ongoing initiatives:

- Recognition and potential consideration of supplier diversity certifications during the procurement process.
- Onboarding and periodic interactions to update supplier information and diverse certification recognition.
- Annual mailings that relay the Company's expectation with respect to the [Supplier Code of Conduct Policy](#) and [Labor and Human Rights Policy](#).
- Continuing to build affiliations and partner with external organizations to promote the importance of utilizing diverse suppliers while leveraging these relationships to identify new suppliers.

**Diverse suppliers<sup>1</sup> have self-identified in one of the following classifications:**

- ✓ **Minority Owned Business**
- ✓ **Women Owned Business**
- ✓ **Disabled Owned Business**
- ✓ **LGBTQ+ Owned Business**
- ✓ **Service Disabled Veteran Owned Business**

<sup>1</sup> The Company's diverse supplier certification process recognizes business entities that are at least 51% owned and operated by an individual or group that is part of a traditionally underrepresented or underserved group based on the list of certified classifications.

## Engaging with Local Diverse Suppliers

During Black History Month, EDGEFuel organized a Black Business Market where employees were invited to shop and support local minority businesses at the Company's headquarters. Subsequently, the Company has also collaborated with some of these vendors for other Company events.



National Fuel is a proud participant of Erie County's Level Up initiative that aims to create contract opportunities within the private sector for business owners who come from disadvantaged backgrounds and operate a business within a low-income zip code across the Western New York region.

“National Fuel has been a model corporate partner in their participation in Erie County's Level Up initiative. Through the initiative's coordination, National Fuel has matched with several local businesses which have been given an opportunity at right-sized contracts, providing the upward mobility that Level Up intended.”

– April Baskin, Chairwoman of the Erie County Legislature



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# Serving Our Communities

For more than 120 years, National Fuel has provided safe, reliable and affordable gas service to the communities where we live and work.

Our relationships with our customers and local communities are central to our mission and ongoing success as a Company. Within our operating territories, where customers frequently experience very cold days for prolonged periods of time, our reliable, weather-hardened infrastructure is critical to serving the region's energy needs. The resiliency of the Company's pipeline systems, coupled with access to affordable energy supplies due to regional shale development, ensures that the Company continues to provide affordable and reliable energy to our customers when they need it most.

- ✓ **Delivering affordable regional natural gas**
- ✓ **Resilient weather-hardened infrastructure**
- ✓ **Continued environmental justice awareness**

- ✓ **Safety messaging and community engagement**
- ✓ **Locally staffed customer service call centers**
- ✓ **Utility customer end-use efficiency and conservation incentive programs**



## Serving Our Customers

### Quality Customer Service

Our local employees promptly answer customer service calls in facilities within our service territory. Our customer-focused approach has led to high levels of customer satisfaction and exceptionally low rates of customer complaints.

#### Utility's Residential Customer Satisfaction Rates<sup>1</sup>

- New York: 91.9%
- Pennsylvania: 88.4%

### Service Affordability

We have been successful in keeping natural gas utility service affordable for our customers. Our customers have seen the direct benefit of regional natural gas shale development in the form of low energy costs. Additionally, with the support of our state commissions, our Utility has prioritized the development and administration of programs designed to reduce energy costs for low-income utility customers.

#### Utility's Residential Delivery Gas Rates<sup>2</sup>

- Ranked #2 and #3 (for New York and Pennsylvania rates) in the northeastern United States

### Service Reliability

In 2023, our businesses faced severe winter weather but experienced minimal operational disruptions, demonstrating the strength and dependability of our facilities. We are committed to making ongoing investments to help ensure the long-term safety, reliability and integrity of our system and assets, ensuring consistent service for our customers.

#### Continued Reliable Service

- Downstream Segment – Near 100% utility service reliability<sup>3</sup>
- Midstream Segment – Near 100% reliability during fiscal year 2023 and served peak demand
- Upstream Segment – Strategic planning and coordination to minimize weather-related production interruptions

<sup>1</sup> Residential satisfaction rates reflect fiscal year end results.

<sup>2</sup> Based on U.S. Energy Information Administration ("EIA") analysis for 2022. On June 15, 2023, an Order was issued under Docket No. R-2022-3035730, adopting new rates, effective August 1, 2023 for the Utility's Pennsylvania service territory. Under Case 23-G-0627,a pending rate case would adopt new rates effective October 1, 2024 for our New York service territory.

<sup>3</sup> Value is for the 12 months ended December 31, 2023 and represents the percentage of New York Distribution customers with no unscheduled outages due to the Company's error.



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# Energy Affordability

Our Company has a strong record of safely, reliably and cost-effectively operating our systems and delivering natural gas to our customers, even during extreme weather events. Natural gas has consistently ranked as our service territories' most affordable energy source. Appalachian shale development has improved the availability and affordability of natural gas which directly benefits end-use customers.

## Utility Focus

Within Distribution Corporation's New York and Pennsylvania service territories, the Company provides natural gas service to approximately 93% and 84% of households, respectively. In conjunction with the state commissions, our Utility continues to focus on just and reasonable rates for our customers. As poverty rates in our

service territories are above the national average, reliable access to affordable energy supplies is, and will continue to be, critical to promoting the welfare of the communities we serve and ensuring energy equity for all our customers.

An analysis of data published by the Energy Information Administration (EIA) found that in 2022, the Company's Utility had the lowest residential delivery rate in New York and Pennsylvania and ranked #2 and #3, respectively, for affordability in the entire northeastern United States.<sup>1</sup> Distribution Corporation has also efficiently managed its utility systems, limiting the occurrence of delivery rate increases. Since 2009, the average retail residential customer in our New York and Pennsylvania service territories has seen a decrease of \$250 and \$402, respectively, on their annual natural gas bills. These savings help to reduce the economic burden of energy for our customers and bolster local economies.

External factors impacting affordability could increase our rates and potentially impact our customers' ability to pay their monthly natural gas bills, which may result in higher costs for the Company in the form of uncollectible accounts. To reduce these risks and help our customers, our Utility has introduced various customer service programs. These include budget billing and extended deferred payment plans, which are meant to stabilize customer bills and encourage timely payments from customers.

## External Factors Impacting Affordability

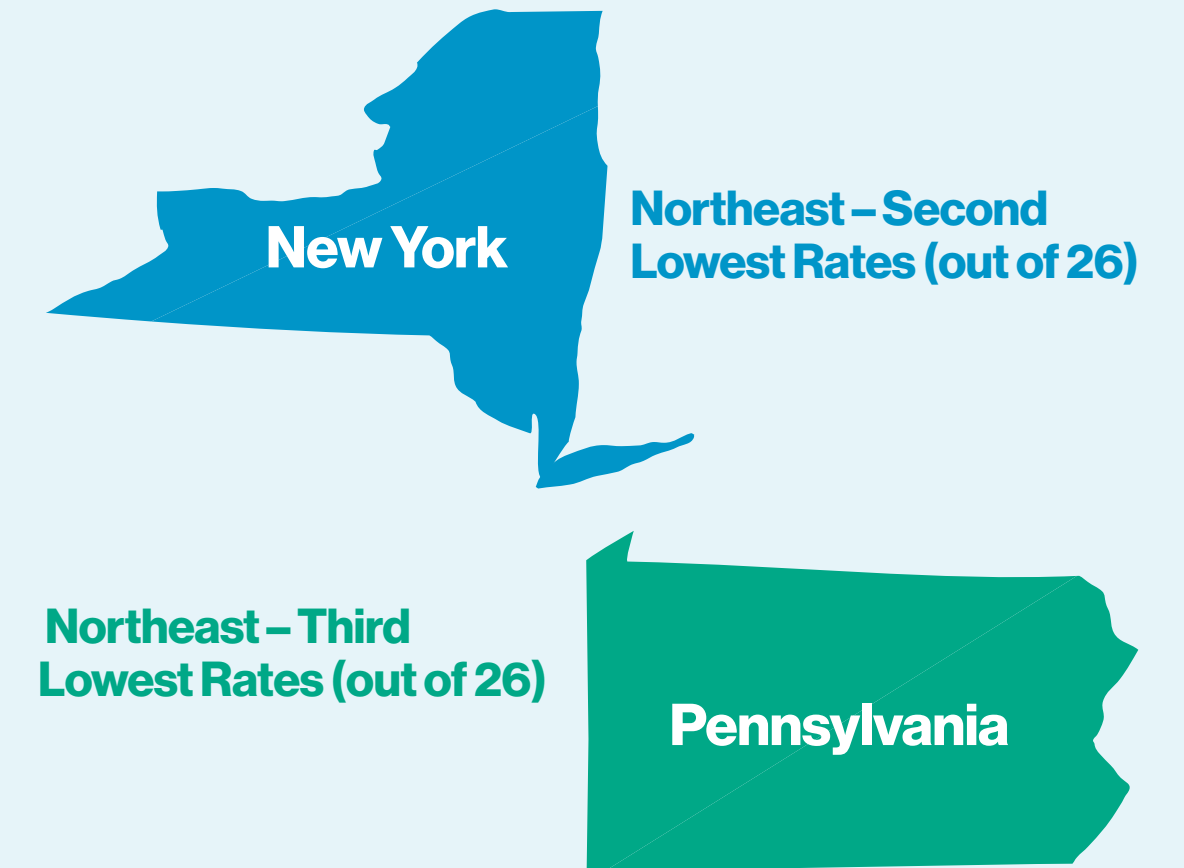
### Regional Economic Conditions

Our utility service territories primarily serve the Buffalo, New York, and Erie, Pennsylvania markets. Although these areas have seen some slight improvement after a long economic decline that began in the 1970s, historically, the Buffalo and Erie markets have lagged behind most larger U.S. markets in median household income.

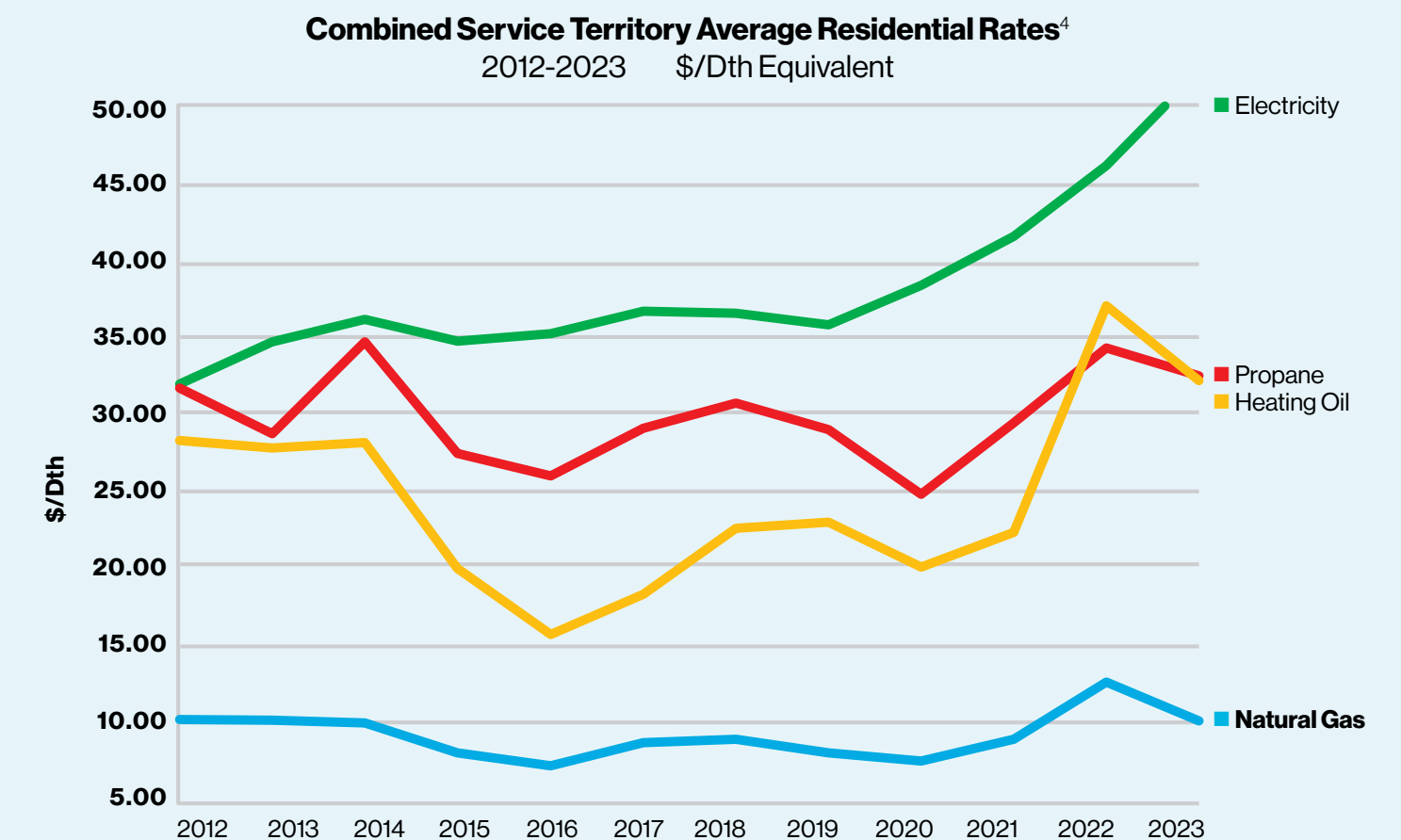
	Buffalo-Niagara, NY		Erie, PA		New York State	Pennsylvania	United States
	Region	City	Region	City			
Median Household Income <sup>2</sup>	\$66,948	\$46,184	\$59,396	\$43,135	\$81,386	\$73,170	\$75,149
Poverty Rate <sup>3</sup>	13.8%	27.2%	14.9%	24.3%	14.3%	11.8%	11.5%
Unemployment Rate <sup>3</sup>	3.4%		3.3%		4.1%	3.8%	3.5%

<sup>1</sup> On June 15, 2023, an Order was issued under Docket No. R-2022-3035730, adopting new rates, effective August 1, 2023 for the Utility's Pennsylvania service territory. Under Case 23-G-0627, a pending rate case would adopt new rates effective October 1, 2024 for our New York service territory.  
<sup>2</sup> July 2023 figures from the U.S. Census Bureau  
<sup>3</sup> December 2023 Figures from the Bureau of Labor Statistics

## Focus on Affordability



## Affordability of Natural Gas



**Electricity is 3 – 4.5 times more costly than natural gas.**

<sup>4</sup> Average residential rates represent gas costs to customers which include the following costs, demand, commodity and a twelve-month average of delivery costs.



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### Commodity Prices

Costs to purchase, transport, store and deliver natural gas supplies are passed along to Distribution Corporation's customers through a commodity supply charge. Volatility in national and regional commodity markets, upstream disruptions in the natural gas supply chain, pipeline constraints and general imbalances in supply and demand can potentially increase the cost of natural gas supplies and, ultimately, the rate charged to customers as natural gas is consumed.

### Weather

Our service territories are known for harsh winters. As a result, a colder-than-normal winter generally increases customer consumption and potentially increases a customer's average bill through higher natural gas supply and delivery charges. Additionally, extreme weather has the potential to generate price spikes on natural gas supplies purchased in daily spot markets to meet the increased customer demand in both New York and Pennsylvania. Distribution Corporation's tariffs include a weather normalization adjustment ("WNA") mechanism. The WNA mechanisms, which cover eight months during the winter heating season, have a stabilizing effect on customers' bills and utility revenues while mitigating the potential for

the Company and its customers to materially benefit from, or be burdened by, higher/lower usage resulting from colder- and warmer-than-normal weather.<sup>1</sup>

Every year, Distribution Corporation conducts a thorough winter planning process in New York and Pennsylvania to ensure that our Downstream Segment has enough pipeline capacity, stored supplies and long-term purchase contracts to meet the expected winter demand, even on the coldest day.

This planning process helps ensure a reliable supply while reducing the risk of sudden price increases. In recent years, our system has proven to be reliable during extreme weather events, with minimal customer outages. As we brace for more frequent and severe weather events, it's crucial that we continue to serve our customers with as few interruptions as possible.

### Regulation

Our Utility's delivery rates are regulated and set by the state utility commissions in New York and Pennsylvania. While the rate-setting process is designed to produce rates that are just and reasonable for all customers, the ratemaking process is subject to political and policy influences that may apply upward pressure on customer rates. Several other circumstances exist where legislation and government policy at

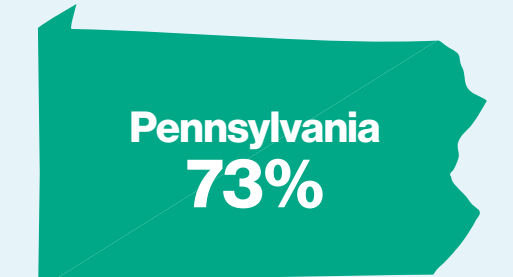
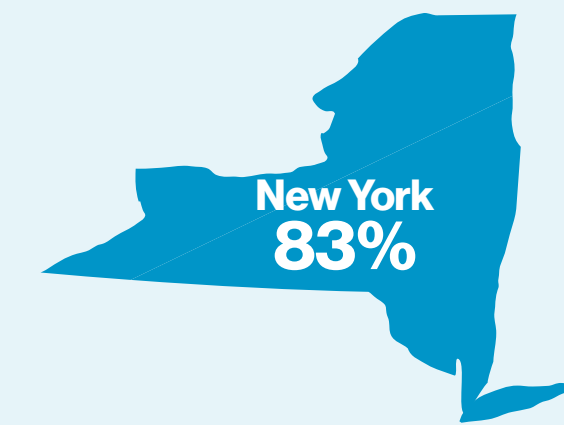
the federal, state and local levels could directly or indirectly impact our rates. These may include environmental regulations that restrict natural gas production or the development and operation of transmission pipelines; the implementation of additional taxes, including a carbon tax, on natural gas services; and income tax policy.

The Downstream Segment faces significant regulatory impact from New York's Climate Act. The act aims to reduce greenhouse gas (GHG) emissions in New York by 40% in 2030 and 85% by 2050, relative to a 1990 baseline, and achieve zero emissions power generation by 2040. To support this, the NY PSC has initiated a gas system planning process, requiring each LDC to submit a long-term plan (LTP) every three years and annual updates on May 31 in the interim years. On July 17, 2023, Distribution Corporation became the first utility in NY to issue its LTP, demonstrating its commitment to responsible GHG emissions reductions, improving the energy system's resilience and providing customers with safe, reliable and affordable energy services. On December 14, 2023, the Commission issued an order implementing the LTP with modifications.

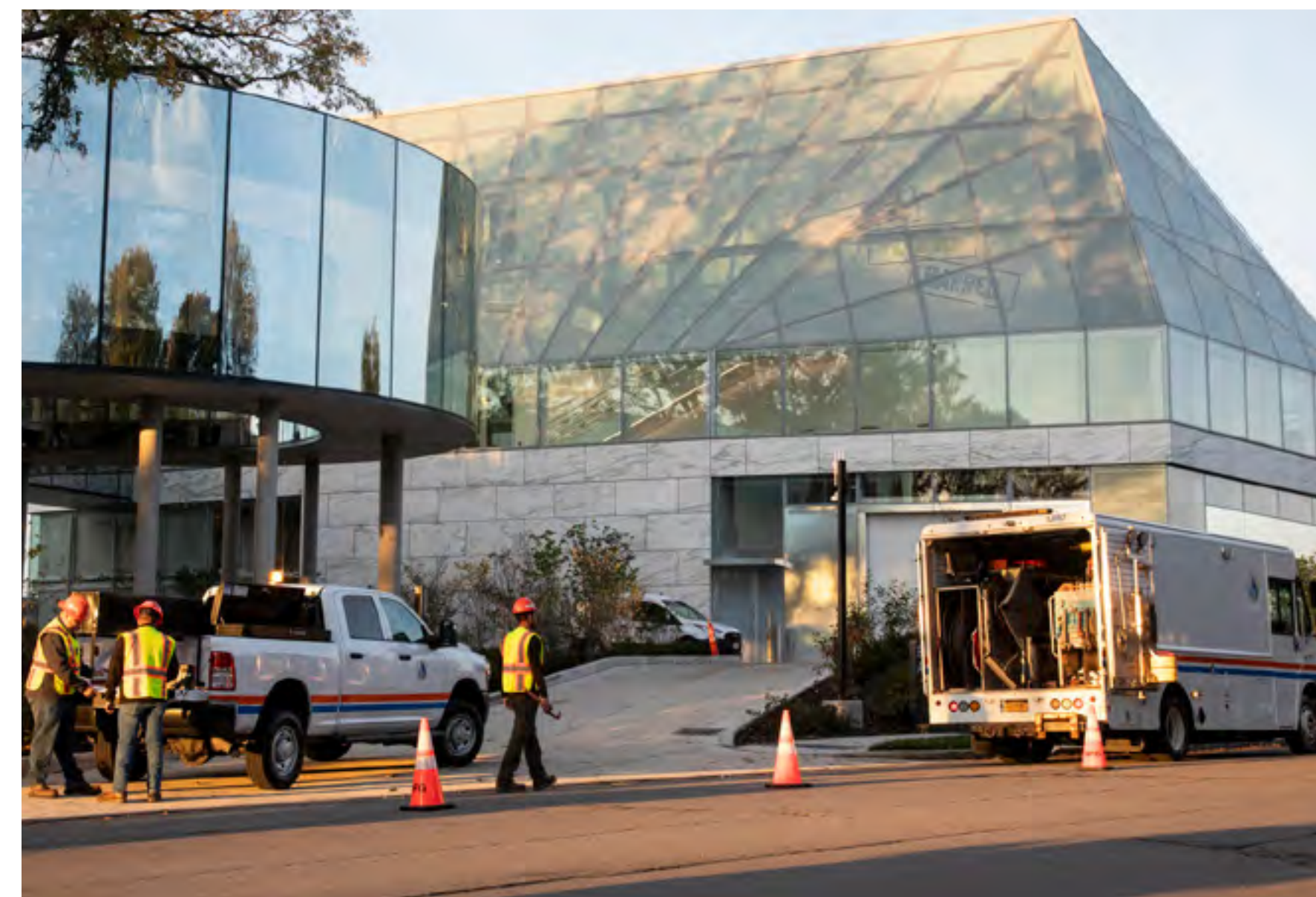
# Reliability of Natural Gas

**45% colder<sup>2</sup>**  
Western New York weather vs. Downstate

**99%<sup>3</sup>**  
National Fuel utility service reliability



Our Utility customers that use natural gas for heating purposes<sup>4</sup>



<sup>1</sup> Pennsylvania WNA went into effect August 1, 2023.  
<sup>2</sup> Value is calculated using the average of the actual heating degree days for calendar years 2012-2023 as reported by the National Oceanic and Atmospheric Administration for the Buffalo Niagara Airport and LaGuardia Airport locations.  
<sup>3</sup> Value is for twelve months ended December 31, 2023 and represents the percentage of New York Distribution customers with no unscheduled outages due to the Company's error.  
<sup>4</sup> Based on 2021 Utility Residential Market Study.



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# End-Use Efficiency

Our Downstream Segment continues to focus on promoting energy efficiency. We partner with our regulators, industry groups and local businesses to develop and administer outreach and incentive programs designed to reduce our customers' energy usage through improved appliance efficiency and consumption habits.

In New York, our Conservation Incentive Program (CIP) is funded by ratepayers through a monthly bill surcharge. The CIP is comprised of the following programs:

- Residential and Non-Residential Rebate Programs: Equipment replacement programs that offer rebate incentives to replace aging and inefficient space and water heating equipment, as well as process heating equipment with respect to business rebates, with high efficiency appliances.
- The Statewide Low-Moderate-Income Portfolio (LMI): A weatherization program that is specifically designed to help low-income residential customers reduce their energy consumption. The program offers qualifying customers heating system checks, energy audits and weatherization measures.
- Outreach and Education: Includes marketing across a variety of media and platforms to educate customers about their energy usage habits and promote energy efficiency programs.

## Customer Gas Savings From Efficiency Measures

The following table shows the total amount of gas savings delivered to New York customers from the CIP.

	2023
Residential Rebate Program	137,407
Non-Residential Rebate Program	20,929
LMI	25,233

Our Downstream Segment has seen steady growth in its residential rebate programs while non-residential programs appear to fluctuate year to year based on activity. The recent Energy Efficiency proceeding in New York provided utilities with additional ratepayer funding for energy efficiency programs over and above current CIP budgets. Distribution Corporation spent \$39 million on energy efficiency programs and initiatives between 2020-2022 and expects to spend nearly \$46 million on energy efficiency programs and initiatives between 2023 and 2025. Notably, for program years 2022-2025, Distribution Corporation is offering a rebate for a hybrid heating system, which is expected to be an effective measure for reducing GHG emissions without compromising resiliency.

## Promoting Energy Efficiency Programs

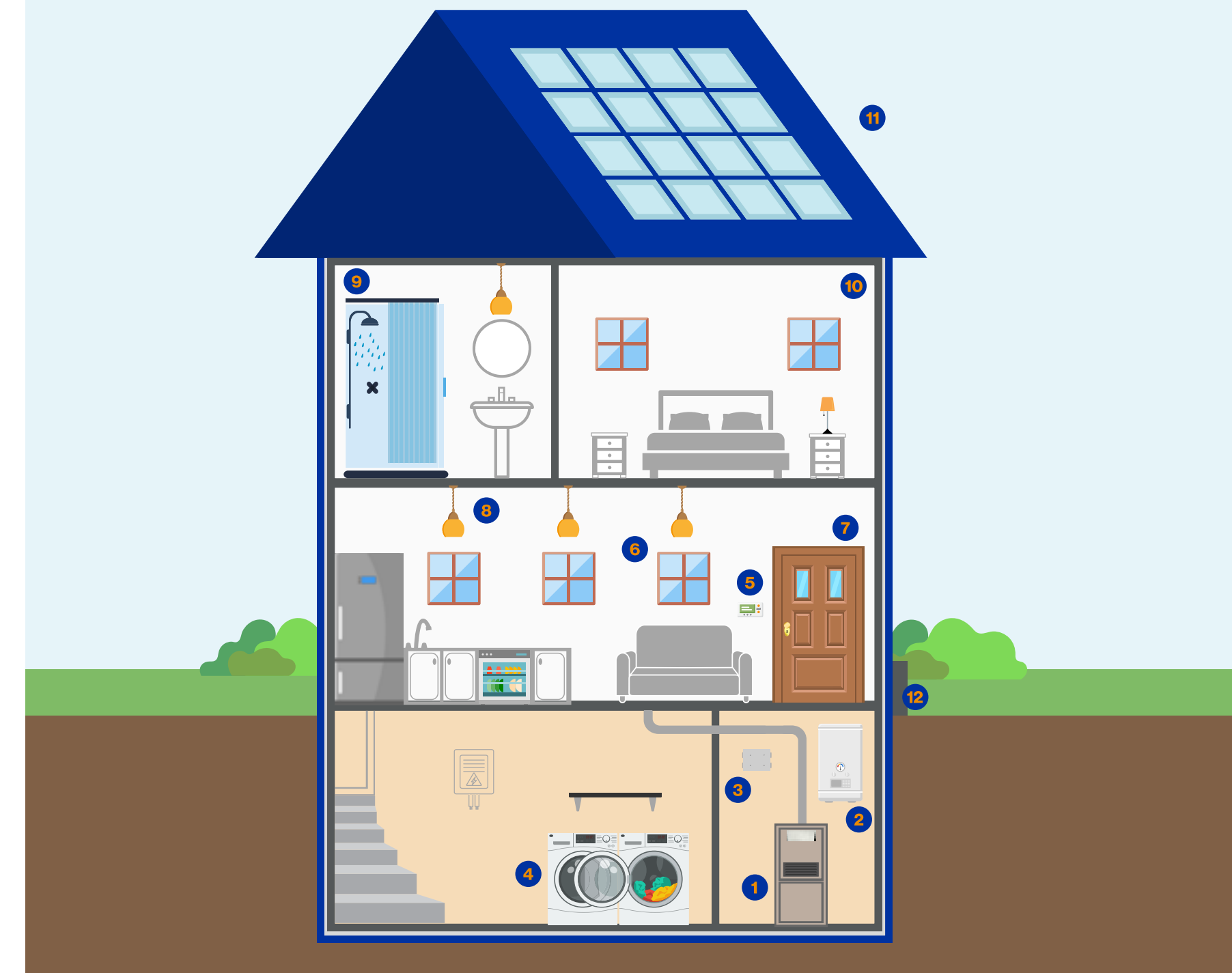
### HomeServe Partnership Pilot

HomeServe provides homeowners with installation and maintenance services for heating and cooling projects. The Company and HomeServe partnered on a pilot program to educate customers on installing efficient heating systems and potentially upgrading their heating and cooling systems to high efficiency natural gas furnaces or Hybrid Heating systems.

### Hybrid Heating System Demonstration Projects

A hybrid heating system consists of a high efficiency natural gas furnace and an electric air source heat pump (ASHP). These integrated natural gas and electric systems work together to provide more reliable and resilient heating and cooling for homeowners while delivering lower greenhouse gas emissions. With respect to a residence that utilizes a hybrid heating system, annual home energy costs are expected to be more affordable and would avoid the significant costs associated with full electrification.

- The hybrid system is designed to switch heating from an electric heat pump to a gas furnace at temperatures below 30 degrees. As a result, gas consumption and associated emissions can be significantly reduced. A \$1,350 rebate is added to the energy efficiency program for a combination 15 SEER ASHP/95% furnace.



## Features of an Energy Efficient Home

- 1. High Efficiency Furnace**  
Creates more heat with less energy
- 2. Tankless Water Heater**  
Heats water efficiently
- 3. Heat Recovery Ventilation**  
Distributes fresh air throughout the home
- 4. Tier Three Appliances**  
Represents highly efficient household appliances
- 5. Energy Management**  
Optimizes energy use throughout home
- 6. High Performance Doors and Windows**  
Reduces heat loss and increases daylight into home
- 7. High Quality Air Sealing**  
Reduces largest source of heat loss
- 8. LED Lighting**  
Provides low energy, high quality lighting
- 9. Low-Flow Water Fixtures**  
Reduces amount of hot water being utilized
- 10. Double Insulation**  
Reduces heating and cooling demand
- 11. Solar/Photovoltaic Panels**  
Converts and stores energy to meet demand
- 12. Gas Meter**  
Measures natural gas quantity and rate of flow

<sup>1</sup> Gas savings are calculated on a gross basis consistent with the New York energy efficiency proceeding (NY 07-M-0458).





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# Giving Back to Our Communities

National Fuel is dedicated to supporting the communities where we operate. We strive to align our Foundation’s philanthropic giving with our involvement in community fundraisers, ensuring they reflect our guiding principles.

We are dedicated to supporting and expanding initiatives that allow our employees to participate in community programs and volunteer locally with their coworkers, thereby strengthening their relationships with our stakeholders.

- ✓ **Employee Charitable Giving Program**
- ✓ **Continued Focus on Local Job Creation**
- ✓ **Established Community Volunteer Programs**
- ✓ **Continued Trainings with Local Communities Focused on Safety**
- ✓ **Days of Doing Community Service Event**
- ✓ **Corporate Foundation**



## Seneca Charitable Giving Program

Seneca has established an internal charitable giving committee to review donation requests and ensure donations align with its giving pillars and core values. In 2023, Seneca directed donations toward programs to build healthy and safe communities, protect and improve the environment, and support healthy and thriving societies.



## The Employee Resource Group Grant Program

The Employee Resource Group (ERGs) Grant Program enables the company’s ERGs to fuel positive change in our communities. ERGs can nominate non-profit organizations that resonate with their mission to receive grants of up to \$10,000 from the National Fuel Gas Company Foundation. In 2023, the Foundation approved ERG Grants totaling \$40,000 for 13 nonprofit organizations in New York, Pennsylvania and Texas.

Since its inception in 2005, the Foundation and our employees have given **more than \$25 million** to over 1,000 organizations



# Corporate Philanthropy

**In 2023, our Company Foundation and our employees donated more than \$1.7 million to support communities where we live and work.** The Foundation is a 501(c)(3) private foundation funded entirely by shareholders. Our areas of giving are focused on the Foundation's pillars.



## Community Enrichment & Safety

Improve community safety, foster inclusion, promote diversity and enrich the overall quality of life in our communities.



## Education

Advance STEAM (Science, Technology, Engineering, Arts and Mathematics) education and prepare students to compete in the workforce.



## Environmental Stewardship

Support the preservation of natural resources, environmental education, watershed protection, emissions reduction and environmental enhancements.



## Veteran Services

Fund support services that directly benefit veterans and active service members and their families.

### Grant Example:

The Susquehanna Health Foundation (SHF) is the philanthropic arm of UPMC in North Central Pennsylvania. One of its major initiatives is purchasing a 37-foot community health mobile unit to provide vital healthcare services to underserved communities in Tioga, Potter and Lycoming counties. The mobile unit will target the 20,000 individuals in the region who do not have access to primary care. The Foundation's closing gift for the project of \$32,700 has been instrumental in making this initiative a reality.

### Grant Example:

National Fuel became the corporate sponsor of Woodrow Wilson Middle School in Erie, PA, by supporting the United Way of Erie County's community school initiative. This initiative focuses on promoting success by meeting the needs of students and families and relies on the support of corporate partners who donate resources and time. National Fuel will not only provide the school with \$225,000 over the course of three years, but will also engage with students through volunteer opportunities, career mentoring and STEAM activities.

### Grant Example:

Tift Nature Preserve (Tift) is a 264-acre nature sanctuary on the Buffalo, New York Outer Harbor. The Foundation awarded Tift \$30,000 to support the second phase of its East Canal Ecological Renovation Project. The project aims to restore 63 acres of aquatic, riparian woodland and grassland/scrub-shrub habitat through invasive species management, streambank stabilization and revegetation efforts.

### Grant Example:

The Buffalo-Niagara Honor Flight is a volunteer-run organization that provides expense-paid trips to Washington D.C. for World War II, Korean and Vietnam Veterans. These trips aim to give Veterans the chance to visit national memorials that honor their service and sacrifice. Our Foundation has proudly supported the Honor Flight for several years and has committed \$75,000 to fund flights in 2023, 2024 and 2025.

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# Employee Charitable Giving Program

The Foundation's Employee Charitable Giving Program aligns a significant portion of National Fuel's charitable support with the preferences and generosity of its employees. The program matches employee donations to their selected nonprofits, dollar for dollar, up to \$1,000.

Open enrollment for the 2024 program year led to a rise in employee participation.

National Fuel also supports a variety of community fundraisers and takes part in numerous community events, professional associations, chambers of commerce and business development groups.

## Employee Charitable Giving Champions



"Since starting with National Fuel a little over 2 years ago, I've supported both the Juvenile Diabetes Research Foundation and our church, North Street Community Church, through the Company's Employee Charitable Giving Program. These are two organizations that our family already supported and gave to, so it only made sense to make our giving go a little further. This program is such an easy way to do that!"

**Megan VanNoy**  
Business Development,  
Midstream, PA



"Prior to my employment at National Fuel, my son experienced an issue with his foot. He was very young and could hardly walk at times. We were referred to Shriners Children's Erie and he ended up making a full recovery. When I came to work at National Fuel and learned of the charitable giving program with the Company's matching donations, I knew where my donation would be going. Being able to contribute to an organization that impacted me personally gives me great joy."

**Aaron Prazer**  
Consumer Business,  
Distribution, PA



"Each of us possesses the power to make a difference through philanthropy, regardless of the size of our contributions. Over the years, I have had the privilege of supporting various organizations, including Friends of the Night People, The Boys & Girls Club of Buffalo, Catholic Academy of West Buffalo, Kevin Guest House, and my church – St. John."

**Ronnie Lumpkin**  
Human Resources,  
Distribution, NY



- ✓ 47% Employee participation
- ✓ Employees have contributed more than \$10 million since 2005

- ✓ 20% of participants pledge \$1,000+
- ✓ 11% increase in employee pledge commitments



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# Community Involvement

Our Company's Faces of Fuel and Seneca Serves programs offer volunteer opportunities for employees to give back to the communities where they live and where the Company operates. Through these programs, employees donate their time and raise funds for local non-profits and charitable organizations.



## Days of Doing

In 2022, National Fuel created Days of Doing, a three-day community service event, as an extension of the Company's Faces of Fuel and Seneca Serves volunteer programs. Days of Doing allows employees to volunteer during work hours with various nonprofits in New York, Pennsylvania and Texas. This year, volunteer projects aligned with our guiding principles of Environmental Stewardship and Community, focusing on outdoor conservation and supporting community organizations. The Company's Foundation supplied grants to Days of Doing nonprofits to match its volunteer efforts.



**700+  
Employees  
Participated**



**\$35,000  
Foundation  
Grants  
Awarded**



**2,300  
Total Hours  
Volunteered**

✓ **Raised more than \$48,000 at fundraising events**

✓ **Donated more than 920 pounds of food for local food banks**

✓ **Donated more than 3,900 hours**

✓ **Supported 22 families through Veterans organization holiday drive**

✓ **Participated in more than 100 volunteer events**

Learn more about Days of Doing visit: <https://vimeo.com/987211875?share=copy>

<sup>1</sup> Calculated using estimated national value of each volunteer hour as determined by independentsector.org



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# Focus on Education

In addition to being a Foundation pillar for philanthropic giving, the Company continues to focus on opportunities to inform the public on the production and distribution of natural gas, as well as provide meaningful experiences to the next generation of professionals, engineers and scientists.

### Intern Spotlight

<p><b>Owen H.</b></p> <p>Operations - Business Support St. Bonaventure University Finance</p>	<p><b>Caitlin K.</b></p> <p>Risk Rochester Institute of Technology Environmental Sustainability, Health and Safety BS/MS</p>
<p><b>Amma D.</b></p> <p>Supply Chain/Purchasing University at Buffalo Operations and Supply Chain Management</p>	<p><b>Maxwell D.</b></p> <p>Engineering - Commercial Services University at Buffalo Mechanical Engineering</p>



## Community School Partnership

National Fuel became the Community School Partner of Woodrow Wilson Middle School in Erie, Pennsylvania. Employees recently visited the school to lead students through different hands-on activities that demonstrated density, volume, porosity and the creation of methane gas, and explained how each of these concepts relate to our work in the industry.



## Seneca's Energy Explorers

This program seeks to enrich students' comprehension of natural gas production, while motivating future generations of scientists and engineers. The program is led by employees, including geologists, geophysicists, engineers and environmental specialists. During the program, students learned about petroleum engineering, air and water quality, and gas exploration, including our efforts to protect and enhance natural habitats. Similar to Seneca's efforts to plant native seed mixes that attract pollinators, students created and decorated "bug hotels" to take home and help promote pollination in their own backyards.





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## Cautionary Note on ESG Data and Forward-Looking Statements

All information included in this Corporate Responsibility Report (“Report”) is being provided on a voluntary basis and, as such, the Company has customized certain sustainability standards and frameworks to our specific circumstances. The decision to include data for historical and future years is at the discretion of the Company and its subsidiaries, and the specific years used as a historical baseline were chosen as appropriate for each reporting segment. The data included in this Report does not constitute financial data calculated in accordance with U.S. generally accepted accounting principles (“GAAP”). This Report also contains “forward-looking statements” as defined by the Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements concerning plans, objectives, goals, projections, strategies, future events or performance, and underlying assumptions and other statements, other than statements of historical facts, as well as statements that are identified by the use of the words “anticipates,” “estimates,” “expects,” “forecasts,” “intends,” “plans,” “predicts,” “projects,” “believes,” “seeks,” “will,” “may” and similar expressions. This Report and the statements contained herein are submitted for the general information of Company stakeholders and are not intended to induce any sale or purchase of securities or to be used in connection therewith. While the Company’s expectations, beliefs and projections are expressed in good faith and are believed to have a reasonable basis, actual results may differ materially from those projected in forward-looking statements. Furthermore, each forward-looking statement speaks only as of the date on which it is made. In addition to other factors, the following are important factors that could cause actual results to differ materially from those discussed in the forward-looking statements: (1) the Company’s ability to estimate accurately the time and resources necessary to meet applicable testing standards, reporting frameworks, and emissions targets, as well as the cost and availability of capital required for such projects; (2) evolving standards and frameworks, including those related to tracking and reporting GHG and methane emissions; (3) changes in the Company’s business, including acquisitions or other expansions of the Company’s property, plant and equipment; (4) disallowance by applicable regulatory bodies of appropriate rate recovery for system modernization; (5) the development and performance of new technology and products, services, and programs, particularly those related to energy efficiency and emission reductions; (6) governmental initiatives or market pressures to reduce or eliminate reliance on natural gas, and the viability of energy-transition related opportunities, including adaptation of the Company’s existing assets; and (7) the other risks and uncertainties described in (i) the Company’s most recent Annual Report on Form 10-K at Item 7, MD&A, and Quarterly Reports on Form 10-Q at Item 2, MD&A, in each case under the heading “Safe Harbor for Forward-Looking Statements,” and (ii) the “Risk Factors” included in the Company’s most recent Annual Report on Form 10-K at Item 1A, as updated by the Company’s Forms 10-Q for subsequent quarters at Item 1A. Forward-looking and other statements in this Report regarding our plans and goals are not an indication that these statements are material to investors or are required to be disclosed in our filings with the Securities and Exchange Commission. The Company disclaims any obligation to update any forward-looking statements to reflect events or circumstances after the date hereof. Because of these risks and uncertainties, readers should not place undue reliance on these forward-looking statements or use them for anything other than their intended purpose. This Report contains references to National Fuel’s website and other reporting documents. National Fuel is not incorporating this Report by reference into any other document and is not incorporating any other document posted on the website into this Report. Except where specified, this Report and the data presented have not been externally audited, assured, attested or verified. The Company makes no warranty, express or implied, regarding the accuracy, adequacy, completeness, legality, reliability or usefulness of this Report.



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## Appendix A: Task Force on Climate-Related Financial Disclosures (TCFD)

TCFD Pillar	Metric	Report Section
<b>Governance</b>	Describe the board's oversight of climate-related risks and opportunities.	<a href="#">Governance of Corporate Responsibility, Sustainability and Climate Risk</a>
	Describe management's role in assessing and managing climate-related risks and opportunities.	<a href="#">Governance of Corporate Responsibility, Sustainability and Climate Risk; Risk Oversight and Risk Management</a>
<b>Strategy</b>	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	<a href="#">Management of Climate-Related Risk and Climate Strategy; Identification and Evaluation of Climate-Related Opportunities</a>
	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	
	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	<a href="#">Evaluating the Resilience of our Business to Climate Risk</a>
<b>Risk Management</b>	Describe the organization's processes for identifying and assessing climate-related risks.	<a href="#">Risk Oversight and Risk Management; Management of Climate-Related Risk and Climate Strategy</a>
	Describe the organization's processes for managing climate-related risks.	
	Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	
<b>Metrics and Target</b>	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	<a href="#">Climate-Related Metrics and Targets</a>
	Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas emissions and the related risks.	<a href="#">Risk Oversight and Risk Management; Greenhouse Gas Emissions</a>
	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	<a href="#">Climate-Related Metrics and Targets; Greenhouse Gas Emissions</a>



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# Appendix B: SASB Standards by Segment

## Downstream Segment – Gas Utilities & Distributors

Topic	Code	Metric	2021	2022	2023	
<b>Energy Affordability</b>	IF-GU-240a.1	Average Retail Gas Rate for:				
		Bundled Retail Sales				
		(1) Residential	\$8.97	\$11.31	\$10.70	
		(2) Commercial	\$8.11	\$10.45	\$9.73	
		(3) Industrial	\$7.45	\$9.50	\$9.26	
		Transportation Sales				
		(1) Residential	\$4.10	\$3.88	\$4.16	
	(2) Commercial	\$2.25	\$2.25	\$2.31		
	(3) Industrial	\$0.77	\$0.84	\$0.88		
	IF-GU-240a.3	IF-GU-240a.3	Number of Residential Customer Gas Disconnections for Non-Payment:			
New York Division			9	14,959	24,898	
Pennsylvania Division			7,091	6,861	6,981	
Percentage Reconnected within 30 Days:						
New York Division			0%	58%	65%	
Pennsylvania Division	0%	50%	51%			
IF-GU-240a.4	IF-GU-240a.4	Discussion of impact of external factors on customer affordability of gas, including the economic conditions of the service territory.	See <a href="#">Energy Affordability – External Factors Impacting Affordability</a>			
<b>End-Use Efficiency</b>	IF-GU-420a.2	Customer gas savings from efficiency measures by market.	See <a href="#">End-Use Efficiency – Customer Gas Savings from Efficiency Measures</a>			
<b>Integrity of Gas Delivery Infrastructure</b>	IF-GU-540a.1	Number of:				
		Reportable Gas Distribution Pipeline Incidents	0	0	0	
		Corrective Actions Received	0	0	0	
	IF-GU-540a.2	IF-GU-540a.2	Violations of Pipeline Safety Statutes	0	0	0
			Percentage of Distribution Pipeline Inventory that is:			
			Cast Iron	0.10%	0.03%	0.00%
	Wrought Iron	1.30%	1.20%	1.20%		
	Unprotected Base Steel	10.80%	10.10%	9.40%		
	IF-GU-540a.3	IF-GU-540a.3	Percentage of Downstream Segment Transmission Pipelines Inspected:			
			Transmission Pipelines (kilometers)	109	109	106
Pipelines Inspected (kilometers)			0.70	2.91	13	
% of Pipeline Inspected			0.60%	2.70%	12%	
% HCA Pipeline Inspected			7.90%	32.70%	28%	
IF-GU-540a.4	IF-GU-540a.4	Description of efforts to manage the integrity of gas delivery infrastructure, including risks related to safety and emissions.	See <a href="#">System Integrity and Safety</a>			

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## Downstream Segment – Gas Utilities & Distributors (continued)

Topic	Code	Metric	2021	2022	2023
Activity Metrics	IF-GU-000.A	Number of Customers Served:			
		Residential	701,908	702,115	701,730
		Commerical	51,469	51,399	51,374
		Industrial	1,038	1,037	1,038
		<b>Total</b>	<b>754,415</b>	<b>754,551</b>	<b>754,142</b>
	IF-GU-000.B	Amount of Natural Gas Delivered (MMcf):			
		Bundled Retail Sales:			
		Residential	60,121	66,668	59,231
		Commercial	8,756	10,073	9,147
		Industrial	445	568	535
		<b>Total Retail</b>	<b>69,322</b>	<b>77,309</b>	<b>68,913</b>
		Transportation Sales:			
		Residential	6,334	6,230	5,061
		Commercial	24,126	25,502	23,313
		Industrial	35,211	34,978	33,830
	<b>Total Transportation</b>	<b>65,671</b>	<b>66,710</b>	<b>62,204</b>	
	IF-GU-000.C	Total Utility Pipeline Length (kilometers):			
		Distribution Mains	23,553	23,572	23,581
		Distribution Services	12,354	12,399	12,427
		Transmission Pipelines	109	109	106
		Regulated Type B Gathering Pipelines	100	77	76
Regulated Type R Gathering Pipelines		–	118	118	
<b>Total Utility Pipelines</b>		<b>36,116</b>	<b>36,275</b>	<b>36,308</b>	



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## Midstream Segment – Oil & Gas: Midstream

Topic	Code	Metric	2021	2022	2023	
<b>Greenhouse Gas Emissions</b>	EM-MD-110a.1	Gross global Scope 1 emissions, percentage methane, percentage covered under emissions-limiting regulations.	See <a href="#">Consolidated Data Tables</a>			
	EM-MD-110a.2	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.	See <a href="#">Governance – Climate-Related Metrics and Targets</a> ; <a href="#">Environmental – Greenhouse Gas Emissions</a>			
<b>Air Quality</b>	EM-MD-120a.1	Air emissions of the following pollutants: (1) NO <sub>x</sub> (excluding N <sub>2</sub> O), (2) So <sub>x</sub> , (3) volatile organic compounds (VOCs), and (4) particulate matter (PM <sub>10</sub> )	See <a href="#">Consolidated Data Tables</a>			
<b>Ecological Impacts</b>	EM-MD-160a.1	Description of environmental management policies and practices for active operations.	See <a href="#">Ecological Impacts and Biodiversity Protection</a>			
	EM-MD-160a.2	Percentage of land owned, leased, or operated within areas of protected conservation status or endangered species habitat.	2%	2%	2%	
	EM-MD-160a.3	Acreage Disturbed and Restored:				
		Acres Not Permanently Restored from Prior Years		17	184	38
		Acres Disturbed in Current Year		516	804	429
		Total Acres Impacted		533	989	467
		Acres Permanently Resored in Current Year		376	436	392
		Percentage of Impacted Area Permanently Restored in Current Year		71%	61%	84%
	EM-MD-160a.4	Number and Volume of Hydrocarbon Spills:				
		Number of Spills Greater than 1 Bbl		1	0	2
		Total Volume of Spills Reported (Bbl)		4	0	8
Total Volume of Spills Recovered (Bbl)		3	0	8		
Total Volume of Spills Occurring in the Arctic <sup>1</sup>		N/A	N/A	N/A		
Total Volume of Spills Impacting Unusually Sensitive Resources (Bbl)		0	0	0		
<b>Competitive Behavior</b>	EM-MD-520a.1	Total amount of monetary losses as a result of legal proceedings associated with federal pipeline and storage regulations related to competitive behavior.	0	0	0	

<sup>1</sup> The Midstream Segment does not operate in the Arctic, which is considered to be the area north of the Arctic Circle.

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## Midstream Segment – Oil & Gas: Midstream (continued)

Topic	Code	Metric	2021	2022	2023
<b>Operational Safety, Emergency Preparedness &amp; Response</b>	EM-MD-540a.1	Incident and Compliance Summary:			
		Reportable Onshore Gas Transmission Pipeline Incidents <sup>1</sup>	0	2	0
		% Significant Onshore Gas Transmission Pipeline Incidents <sup>2</sup>	0	50% <sup>3</sup>	0
		Corrective Action Order Cases Initiated	0	0	0
		Notices of Probable Violation Cases Initiated	1 <sup>4</sup>	0	0
	EM-MD-540a.2	Percentage of Pipelines Inspected:			
		Transmission Pipelines (kilometers)	3,145	3,094	3,063
		Pipelines Inspected (kilometers)	160	364	162
		Percentage of Pipelines Inspected	5.10%	11.80%	5.28%
	EM-MD-540a.3	Number of (1) accident releases and (2) non-accident releases from rail transportation	N/A	N/A	N/A
EM-MD-540a.4	Discussion of management systems used to integrate a culture of safety and emergency preparedness throughout the value chain and throughout project lifecycles.	See <a href="#">Safety</a>			
<b>Environment – Environmental Impacts of Project Development</b>	IF-EN-160a.2	Discussion of processes to assess and manage environmental risks associated with project design, siting and construction	See <a href="#">Ecological Impacts and Biodiversity Protection</a>		
<b>Activity Metric</b>	EM-MD-000.A	Natural Gas Throughput (MMcf)	1,121,823	1,201,925	1,211,459
		Regulated Pipelines (kilometers)	3,197	3,673	3,673
		Total Pipelines (kilometers)	4,404	4,458	4,460
		Compression Horsepower	312,202	382,397	385,939

<sup>1</sup> Reportable is defined as an event that involves a release of gas from a pipeline, or of liquefied natural gas, liquefied petroleum gas, refrigerant gas, or gas from a Liquefied Natural Gas (LNG) facility, and that results in one or more of the following consequences: (1) a death or personal injury necessitating in-patient hospitalization, (2) estimated property damage of \$50,000 U.S. dollars or more, including loss to the operator and others, or both, but excluding cost of gas lost, or (3) unintentional estimated gas loss of three million cubic feet or more. Additionally, any event that results in an emergency shutdown of an LNG facility, activation of an emergency shutdown system for reasons other than an actual emergency does not constitute an incident, or an event that is significant in the judgment of the operator, even though it did not meet the criteria of the above paragraphs of this definition.

<sup>2</sup> Significant is defined as an accident or incident that resulted in (1) fatality or injury requiring in-patient hospitalization, (2) \$50,000 or more in total costs, measured in 1984 U.S. dollars, (3) highly volatile liquid releases of 5 Bbls or more or other liquid releases of 50 barrels or more, or (4) liquid releases resulting in an unintentional fire or explosion.

<sup>3</sup> Incident related to compressor station failure of vent stack assembly, which caused station building damage in excess of \$50,000 threshold. There were no fatalities or injuries as a result of the event.

<sup>4</sup> Case was closed out with no penalty assessed due to remedial actions taken.



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## Upstream Segment – Oil & Gas: Exploration and Production

Topic	Code	Metric	2021	2022	2023
<b>Greenhouse Gas Emissions</b>	EM-EP-110a.1	Gross global Scope 1 emissions, percentage methane, percentage covered under emissions-limiting regulations.	See <a href="#">Consolidated Data Tables</a>		
	EM-EP-110a.2	Scope 1 Greenhouse Gas Emissions by Source Category (Metric Tons CO <sub>2</sub> e):			
		Combustion Sources	105,934	112,222	104,442
		Vented Emissions	153,404	126,783	96,543
		Process Emissions	2,407	2,276	1,928
		Fugitive Emissions	4,304	2,977	1,813
		Flared Hydrocarbons	63	761	393
		<b>Total</b>	<b>266,112</b>	<b>245,019</b>	<b>205,119</b>
EM-EP-110a.3	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.	See <a href="#">Governance – Climate-Related Metrics and Targets</a> ; <a href="#">Environmental – Greenhouse Gas Emissions</a>			
<b>Air Quality</b>	EM-EP-120a.1	Air emissions of the following pollutants: (1) NO <sub>x</sub> (excluding N <sub>2</sub> O), (2) SO <sub>x</sub> , (3) volatile organic compounds (VOCs), and (4) particulate matter (PM <sub>10</sub> ).	See <a href="#">Consolidated Data Tables</a>		
<b>Water Management</b>	EM-EP-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress.	See <a href="#">Consolidated Data Tables</a>		
	EM-EP-140a.2	Volume of produced water and flow back generated; percentage (1) discharged, (2) injected, (3) recycled; hydrocarbon content in discharged water.	See <a href="#">Consolidated Data Tables</a>		
	EM-EP-140a.3	Percentage of hydraulically fractured wells for which there is public disclosure of all fracturing fluid chemicals used.	100%	100%	100%
	EM-EP-140a.4	Percentage of hydraulic fracturing sites where ground or surface water quality deteriorated compared to a baseline.	See <a href="#">Environmental – Water Management and Integrity</a>		



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## Upstream Segment – Oil & Gas: Exploration and Production (continued)

Topic	Code	Metric	2021	2022	2023
<b>Biodiversity Impacts</b>	EM-EP-160a.1	Description of environmental management policies and practices for active sites.	See <a href="#">Ecological Impacts and Biodiversity Protection</a>		
	EM-EP-160a.2	Number and Volume of Hydrocarbon Spills:			
		Number of Hydrocarbon Spills > 1 Bbl	0	0	0
		Total Volume of Hydrocarbon Spills (in Bbls)	0	0	0
	EM-EP-160a.2	Total Volume of Hydrocarbon Spills Impacting Environmentally Sensitive Shoreline	0	0	0
		Total Volume of Hydrocarbon Spills recovered (in Bbls)	0	0	0
		Number of Non-Hydrocarbon Spills > 1 Bbl	1	1	3
		Total Volume of Non-Hydrocarbon Spills (in Bbls)	354	300	1,502
		Total Volume of Non-Hydrocarbon Spills Recovered (in Bbls)	250	Unable to estimate	Unable to estimate
	EM-EP-160a.3	Total Volume of Spills Occurring in the Arctic <sup>1</sup>	N/A	N/A	N/A
		Total Reserves Near Sites with Protected Conservation Status or Endangered Species Habitat:			
		Total Reserves (Bcfe at fiscal year end 2023)	3,853	4,172	4,536
		Reserves within Sites with Protected Conservation Status (Bcfe)	19	17	16
		Percentage of Reserves within Protected Conservation	<1%	<1%	<1%
Reserves within Areas in which Endangered Species Habitat Identified (Bcfe)		88	170	333	
<b>Security, Human Rights &amp; Rights of Indigenous Peoples</b>	EM-EP-210a.1	Percentage of (1) proved and (2) probable reserves in or near areas of conflict.	Seneca does not currently explore for or develop any natural gas reserves located within Indigenous lands or areas of conflict.		
	EM-EP-210a.2	Percentage of (1) proved and (2) probable reserves in or near indigenous land.			
	EM-EP-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict.	See <a href="#">Environmental – Project Planning and Development</a>		
<b>Community Relations</b>	EM-EP-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests.	See <a href="#">Governance – Risk Oversight and Management</a> ; <a href="#">Environmental – Project Planning and Development</a>		
	EM-EP-210b.2	(1) Number and (2) duration of non-technical delays.	Seneca builds additional lead time into its projects to account for anticipated delays, including changing legislation and regulations to permitting and construction project processes.  See <a href="#">Governance – Management of Regulatory Risks</a>		

<sup>1</sup> The Upstream Segment does not operate in the Arctic, which is considered to be the area north of the Arctic Circle.

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## Upstream Segment – Oil & Gas: Exploration and Production (continued)

Topic	Code	Metric	2021	2022	2023
<b>Workforce Health &amp; Safety</b>	EM-EP-320a.1	Total Recordable Incident Rate:			
		Full-Time Employees	0.00	0.48	0.00
		Contract Employees	1.00	0.51	0.87
		Fatality Rate:			
		Full-Time Employees	0.00	0.00	0.00
		Contract Employees	0.00	0.00	0.00
		Near Miss Frequency Rate:			
		Full-Time and Contract Employees	7.82	2.03	10.71
	Average Hours of Health, Safety and Emergency Response Training for Employees	13.27	10.52	15.38	
Total Safety Training Hours for Contractors	5,960	4,316	5,422		
EM-EP-320a.2	Discussion of management systems used to integrate a culture of safety throughout the exploration and production lifecycle.		See <a href="#">Safety</a>		
<b>Reserves Valuation &amp; Capital Expenditures</b>	EM-EP-420a.1	Sensitivity of hydrocarbon reserve levels to future price projection scenarios that account for a price on carbon emissions.	See <a href="#">Governance – Sensitivity of Reserve Levels to Scenarios that Account for a Price on Carbon Emissions</a>		
	EM-EP-420a.3	Amount invested in renewable energy, revenue generated by renewable energy sales.	N/A	N/A	N/A <sup>1</sup>
	EM-EP-420a.4	Discussion of how price and demand for hydrocarbons or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets.	See <a href="#">Governance – Management of Climate-Related Risks and Climate Strategy</a>		
<b>Business Ethics &amp; Transparency</b>	EM-EP-510a.1	Percentage of (1) proved and (2) probable reserves in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index.	0	0	0
	EM-EP-510a.2	Description of the management system for prevention of corruption and bribery throughout the value chain.	See <a href="#">Leadership and Governance – Business Ethics</a>		
<b>Management of the Legal &amp; Regulatory Environment</b>	EM-EP-530a.1	Discussion of corporate positions related to government regulations or policy proposals that address environmental and social factors affecting the industry.	See <a href="#">Governance – Management of Regulatory Risks</a>		
<b>Critical Incident Risk Management</b>	EM-EP-540a.1	Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC) of greater consequence (Tier 1).	0 <sup>2</sup>	0	0
	EM-EP-540a.2	Description of management systems used to identify and mitigate catastrophic and tail-end risks.	See <a href="#">Governance – Risk Oversight and Management; Safety</a>		
<b>Activity Metrics</b>	EM-EP-000.A	Net Gas Production (MMcf/day)	856.17	961.33	1,047.82
		Net Oil Production (MBbl/day)	0.01	0.07	0.08
	EM-EP-000.B	Number of Offshore Sites	0	0	0
	EM-EP-000.C	Number of Terrestrial Sites	966	973	1,027

<sup>1</sup> Seneca utilizes certain renewable energy sources as part of its daily operations, including solar, to power certain site equipment. Revenue is not generated by renewable energy sales.  
<sup>2</sup> 2021 number restated to zero due to the sale of assets in the Western division



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# Appendix C: Workforce Demographic Data

This information is presented in our Report with more detail. Total chart values may not equal 100 due to conventional rounding.

## Gender Diversity

EEO-1 Job Categories	Female	Male	Female	Male	Female	Male
	2021		2022		2023	
	Administrative Support Workers	80.58%	19.42%	81.17%	18.83%	79.81%
Craft Workers	4.55%	95.45%	4.22%	95.78%	3.07%	96.93%
Executive/Senior Level Officials	22.37%	77.63%	22.00%	78.00%	23.43%	76.57%
First/Mid-Level Officials	20.05%	79.95%	19.64%	80.36%	20.10%	79.90%
Laborers and Helpers	5.56%	94.44%	6.67%	93.33%	10.34%	89.66%
Operatives	2.66%	97.34%	2.66%	97.34%	3.07%	96.93%
Professionals	32.88%	67.12%	31.98%	68.02%	30.91%	69.09%
Technicians	16.13%	83.87%	15.56%	84.44%	10.42%	89.58%

## Percentage of Racially/Ethnically Diverse Hires

2021	2022	2023
9.48%	13.49%	13.64%

## Percentage of Gender Diverse Hires

2021	2022	2023
35.55%	33.33%	27.60%

## Average Years of Service

Race/Ethnicity	Years
Black/African American	10.3
White	9.72
Hispanic/Latino	7.39
Other <sup>1</sup>	6.76
Asian	5.11

## Average of Years of Service

Female	Male
10.32	9.37

## Racial and Ethnic Diversity<sup>2</sup>

EEO-1 Job Categories	Asian	Black/African American	Hispanic/Latino	Other <sup>3</sup>	White	Asian	Black/African American	Hispanic/Latino	Other <sup>3</sup>	White	Asian	Black/African American	Hispanic/Latino	Other <sup>3</sup>	White
	2021					2022					2023				
	Administrative Support Workers	0.49%	13.83%	3.16%	0.24%	82.28%	0.98%	13.69%	4.16%	0.49%	80.68%	0.47%	13.62%	3.76%	0.70%
Craft Workers	0.00%	3.41%	0.57%	1.70%	94.32%	0.00%	3.61%	1.21%	1.81%	93.37%	0.00%	3.07%	1.23%	1.84%	93.87%
Executive/Senior Level Officials	0.00%	1.97%	0.66%	0.00%	97.37%	0.00%	2.00%	0.67%	0.00%	97.33%	0.57%	2.86%	1.14%	0.00%	95.43%
First/Mid-Level Officials	0.51%	1.54%	1.29%	0.26%	96.40%	1.02%	2.30%	1.53%	0.25%	94.90%	0.96%	2.39%	1.67%	0.48%	94.50%
Laborers and Helpers	0.00%	14.45%	1.11%	1.11%	83.33%	0.00%	7.78%	0.00%	1.11%	91.11%	0.00%	9.20%	4.60%	1.15%	85.06%
Operatives	0.00%	1.24%	2.66%	1.24%	94.86%	0.17%	1.42%	1.42%	0.89%	96.10%	0.34%	1.70%	1.53%	1.02%	95.40%
Professionals	3.26%	1.90%	2.72%	1.09%	91.03%	2.44%	2.44%	2.71%	1.08%	91.33%	3.38%	2.86%	2.60%	1.56%	89.61%
Technicians	0.00%	1.61%	4.84%	0.00%	93.55%	0.00%	2.22%	0.00%	0.00%	97.78%	0.00%	2.08%	0.00%	0.00%	97.92%

<sup>1</sup> Other includes the following classifications: Native American or Alaska Native, Native Hawaiian or Pacific Islander, and two or more races.

<sup>2</sup> Total values may not equal 100 due to conventional rounding.

<sup>3</sup> Other includes the following classifications: Native American or Alaska Native, Native Hawaiian or Pacific Islander, and Two or More Races.



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## Workforce Demographic Data (continued)

Total Number of Hours Worked <sup>1</sup>		2021	2022	2023
Downstream	Employee	2,532,984	2,594,437	2,679,162
	Contractor			
Midstream	Employee	854,136	873,588	916,122
	Contractor			
Upstream	Employee	374,593	418,570	471,124
	Contractor	2,004,182	2,342,279	2,310,432

OSHA Total Recordable Incident Rate (TRIR) <sup>2</sup>		2021	2022	2023
Downstream	Employee	2.37	3.93	3.28
	Contractor			
Midstream	Employee	1.17	1.37	1.31
	Contractor			
Upstream	Employee	0.00	0.48	0.00
	Contractor	1.00	0.51	0.87

OSHA Days Away, Restricted, or Transferred Rate (DART) <sup>2</sup>		2021	2022	2023
Downstream	Employee	1.74	2.78	2.39
	Contractor			
Midstream	Employee	0.70	1.14	0.87
	Contractor			
Upstream	Employee	0.00	0.00	0.00
	Contractor	0.30	0.26	0.35

<sup>1</sup> Total numbers of hours worked by Segment derive values for TRIR, DART, Fatality Rate and NMFR.  
<sup>2</sup> All values restated to CY.

Fatality Rate		2021	2022	2023
Downstream	Employee	0.00	0.00	0.00
	Contractor	0.00	0.00	0.00
Midstream	Employee	0.00	0.00	0.00
	Contractor	0.00	0.00	0.00
Upstream	Employee	0.00	0.00	0.00
	Contractor	0.00	0.00	0.00

Near Miss Frequency Rate		2021	2022	2023
Downstream	Employee	N/A	N/A	0.90
	Contractor			
Midstream	Employee	N/A	N/A	3.51
	Contractor			
Upstream	Employee and Contractor	7.82	2.03	10.71







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# Appendix D: Consolidated Data Tables

Posted: September 9, 2024

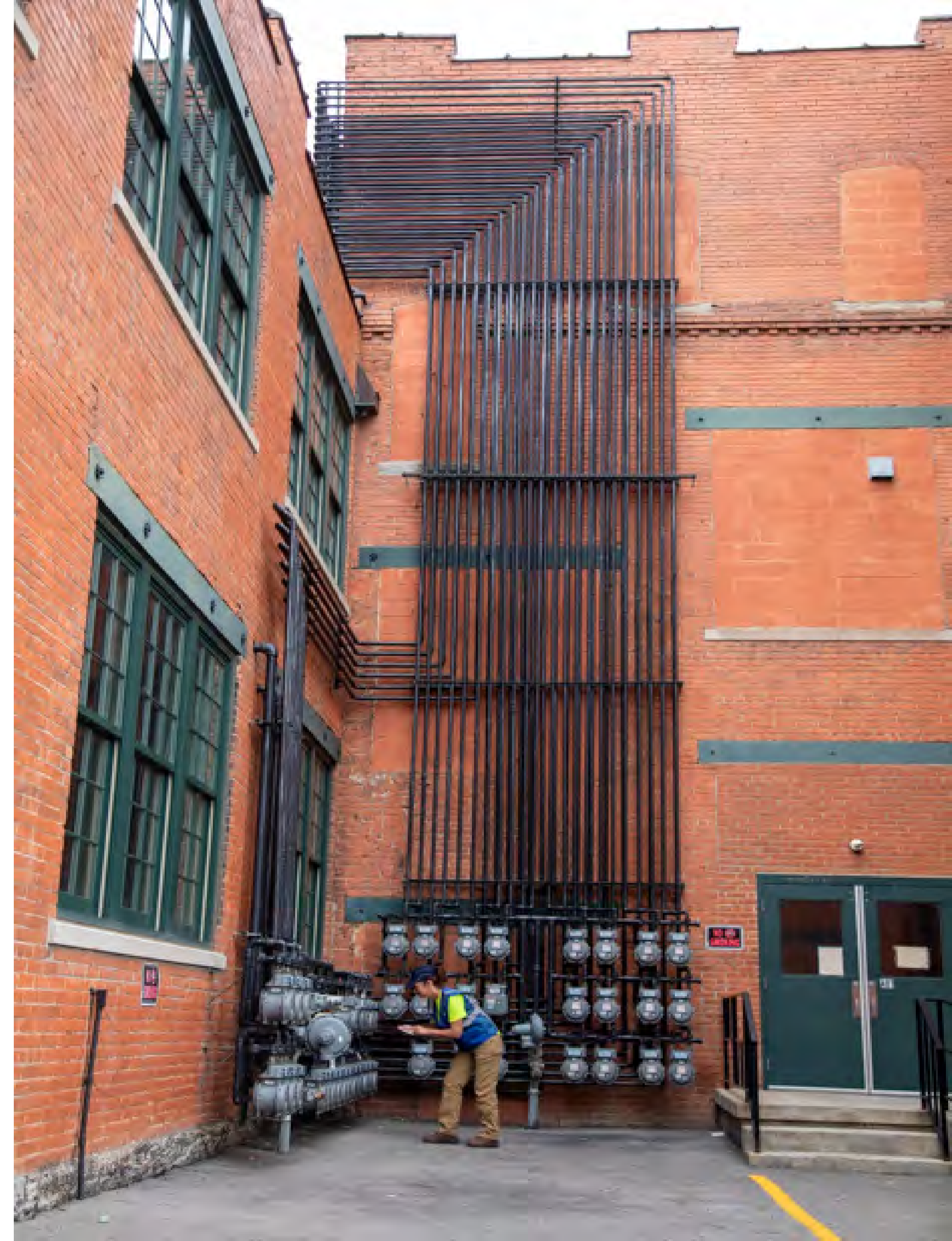
This workbook contains a consolidated view of our ESG metrics for years 2021, 2022, and 2023. Our disclosure primarily uses the standards of the Sustainability Accounting Standard's Board (SASB), but it also encompasses sustainability data considered under our Task Force on Climate-Related Financial Disclosures (TCFD) reporting. This information is presented in our Report with more detail. Total values between charts may vary slightly due to conventional rounding.

## Downstream Segment

	2021	2022	2023
<b>Scope 1 Greenhouse Gas Emissions (Metric Tons CO<sub>2</sub>e)</b>			
<b>Utility (NY &amp; PA)</b>			
EPA Subpart W Mandatory Reporting	257,253	244,982	232,258
Additional EPA Subpart W Facilities	1,505	1,571	973
Other Sources	95,750	95,931	94,416
<b>Total Utility (All)</b>	<b>354,508</b>	<b>342,484</b>	<b>327,647</b>
<b>Scope 1 Methane (CH<sub>4</sub>) Emissions (Metric Tons as CO<sub>2</sub>e)</b>			
<b>Utility (NY &amp; PA)</b>			
EPA Subpart W Mandatory Reporting	256,939	244,684	231,961
Additional EPA Subpart W Facilities	1,505	1,568	973
Other Sources	85,232	85,465	85,610
<b>Total Utility (All)</b>	<b>343,676</b>	<b>331,717</b>	<b>318,544</b>
<b>Scope 2 Emissions (Metric Tons CO<sub>2</sub>e)</b>			
<b>Utility (NY &amp; PA)</b>	1,109	986	949
<b>Scope 1 &amp; 2 Emissions Intensity (kg CO<sub>2</sub>e/BOE)</b>			
<b>Utility (NY &amp; PA)</b>			
Methane Emissions Intensity	13.6	13.3	13.1
Greenhouse Gas Emissions Intensity	14.1	13.7	13.6

<sup>1</sup> The Company began quantifying its Waste Management Program in 2022.

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## Downstream Segment (continued)

	2021	2022	2023
<b>Downstream and Midstream Waste Summary<sup>1</sup></b>			
<b>Solid Waste Weight (MT) – Hazardous</b>			
Incineration		4.63	6.13
Landfill		2.61	0.24
Recovery		0.32	—
Recycled		0.80	1.34
<b>Total Hazardous</b>		<b>8.36</b>	<b>7.71</b>
<b>Solid Waste Weight (MT) – Non-Hazardous</b>			
Incineration		18.16	16.90
Landfill		400.77	1,106.74
Reuse/Recovery		3.76	4.83
Recycled		1,277.25	3,967.19
<b>Non-Hazardous Total</b>		<b>1,699.94</b>	<b>5,095.66</b>
<b>Total Solid Waste</b>		<b>1,708.30</b>	<b>5,103.37</b>
<b>Liquid Waste Weight (Bbl) – Hazardous</b>			
Incineration		189.00	230.38
Landfill		5.24	—
Reuse/Recovery		31.31	2.62
Recycled		1.31	—
<b>Total Hazardous</b>		<b>226.86</b>	<b>233.00</b>
<b>Liquid Waste Weight (MT) – Non-Hazardous</b>			
Incineration		1,159.93	950.43
Landfill		17.02	126.12
Reuse/Recovery		16,464.08	17,243.62
Recycled		870.76	1,141.48
Water Treatment – Disposal		2,392.55	3,949.71
<b>Non-Hazardous Total</b>		<b>20,904.34</b>	<b>23,411.36</b>
<b>Total Liquid Waste<sup>1</sup></b>		<b>21,131.20</b>	<b>23,644.36</b>

<sup>1</sup> Total liquid waste does not include produced water.

	2021	2022	2023
<b>Midstream Volume of Produced Water and Flowback Generated (in Thousands of Cubic Meters)</b>			
Produced Water and Flowback		55.39	50.64
% Discharged		0.00%	0.00%
% Injected for Disposal		69.72%	63.99%
% Recycled		30.28%	36.01%





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## Midstream Segment

	2021	2022	2023
<b>Scope 1 Methane Emissions (Metric Tons CH<sub>4</sub> as CO<sub>2</sub>e)</b>			
<b>Empire</b>			
EPA Mandatory Reporting Sources	5,194	6,230	5,213
Additional EPA Sources	3,315	1,319	798
Other Sources	7,475	7,475	7,475
<b>Total Empire</b>	<b>15,984</b>	<b>15,024</b>	<b>13,486</b>
<b>Supply Corporation</b>			
EPA Mandatory Reporting Sources	96,270	119,081	94,454
Additional EPA Sources <sup>1</sup>	115,044	118,288	104,587
Other Sources	7,442	10,780	8,943
<b>Total Supply Corporation</b>	<b>218,756</b>	<b>248,149</b>	<b>207,984</b>
<b>Midstream Company</b>			
EPA Mandatory Reporting Sources	134,962	147,321	137,800
Additional EPA Sources	1,632	1,236	0
Other Sources	526	536	564
<b>Total Midstream Company</b>	<b>137,120</b>	<b>149,093</b>	<b>138,364</b>
<b>Midstream Segment</b>			
EPA Mandatory Reporting Sources	236,426	272,632	237,467
Additional EPA Sources	119,991	120,843	105,385
Other Sources	15,443	18,791	16,982
<b>Total Midstream Segment</b>	<b>371,860</b>	<b>412,266</b>	<b>359,834</b>

	2021	2022	2023
<b>Scope 2 Emissions (Metric Tons CO<sub>2</sub>e)</b>			
Empire	1,634	582	564
Supply Corporation	4,490	4,400	4,067
Midstream Company	794	843	770
<b>Total Midstream Segment</b>	<b>6,918</b>	<b>5,825</b>	<b>5,401</b>
<b>Scope 1 &amp; 2 Emissions Intensity (kg CO<sub>2</sub>e/BOE)</b>			
<b>Pipeline &amp; Storage (Supply Corporation &amp; Empire)</b>			
Methane Emissions Intensity	1.90	2.04	1.79
Greenhouse Gas Emissions Intensity	4.33	4.41	4.07
<b>Gathering (Midstream Company)</b>			
Methane Emissions Intensity	2.17	2.11	1.77
Greenhouse Gas Emissions Intensity	8.38	7.83	7.15
<b>Midstream Segment</b>			
Methane Emissions Intensity	1.99	2.06	1.78
Greenhouse Gas Emissions Intensity	5.70	5.63	5.26

continued

<sup>1</sup> Minor adjustment to 2021 and 2022 disclosure to better reflect actual emissions (from one Supply facility).



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## Midstream Segment (continued)

	2021	2022	2023
<b>Scope 1 Greenhouse Gas Emissions (Metric Tons CO<sub>2</sub>e)</b>			
<b>Empire</b>			
EPA Mandatory Reporting Sources	94,816	87,576	85,792
Additional EPA Sources	3,814	1,501	972
Other Sources	7,482	7,482	7,482
<b>Total Empire</b>	<b>106,112</b>	<b>96,559</b>	<b>94,246</b>
<b>Supply Corporation</b>			
EPA Mandatory Reporting Sources	256,773	277,514	246,145
Additional EPA Sources <sup>1</sup>	156,826	177,435	146,803
Other Sources	10,786	14,137	11,856
<b>Total Supply Corporation</b>	<b>424,385</b>	<b>469,086</b>	<b>404,804</b>
<b>Midstream Company</b>			
EPA Mandatory Reporting Sources	514,740	542,873	557,463
Additional EPA Sources	12,660	11,837	0
Other Sources	665	709	768
<b>Total Midstream Company</b>	<b>528,065</b>	<b>555,419</b>	<b>558,231</b>
<b>Midstream Segment</b>			
EPA Mandatory Reporting Sources	866,329	907,963	889,400
Additional EPA Sources	173,300	190,773	147,775
Other Sources	18,933	22,329	20,106
<b>Total Midstream Segment</b>	<b>1,058,562</b>	<b>1,121,065</b>	<b>1,057,281</b>

	2021	2022	2023
<b>Air Emissions (Metric Tons)</b>			
<b>Empire</b>			
NO <sub>x</sub>	24	26	28
SO <sub>x</sub>	3	4	4
VOC	4	5	6
PM	2	2	2
<b>Supply Corporation</b>			
NO <sub>x</sub>	411	412	329
SO <sub>x</sub>	3	3	3
VOC <sup>1</sup>	250	257	205
PM	14	14	12
<b>Midstream Company</b>			
NO <sub>x</sub>	330	355	360
SO <sub>x</sub>	3	3	3
VOC	77	91	95
PM	16	16	17
<b>Midstream Segment</b>			
NO <sub>x</sub>	765	793	717
SO <sub>x</sub>	9	10	10
VOC	331	353	306
PM	32	32	31

<sup>1</sup> Minor adjustment to 2021 and 2022 disclosure to better reflect actual emissions (from one Supply facility).



## Upstream Segment

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	2021	2022	2023
<b>Scope 1 Greenhouse Gas Emissions (Metric Tons CO<sub>2</sub>e-AR5)</b>			
<b>Seneca</b>			
EPA Subpart W Mandatory Reporting	247,575	227,046	186,710
Additional EPA Supart W Facilities	0	0	0
Other Sources	18,537	17,973	18,409
<b>Total Seneca</b>	<b>266,112</b>	<b>245,019</b>	<b>205,119</b>
<b>Highland Field Services (All)</b>			
EPA Subpart W Mandatory Reporting	—	0	0
Additional EPA Supart W Facilities	—	0	0
Other Sources	—	14,467	11,807
<b>Total HFS</b>	<b>—</b>	<b>14,467</b>	<b>11,807</b>
<b>Scope 1 Methane Emissions (Metric Tons CH<sub>4</sub> as CO<sub>2</sub>e)</b>			
<b>Seneca</b>			
EPA Subpart W Mandatory Reporting	158,700	130,665	99,034
Additional EPA Supart W Facilities	0	0	0
Other Sources (3)	447	455	396
<b>Total Seneca</b>	<b>159,147</b>	<b>131,120</b>	<b>99,429</b>
<b>Highland Field Services (All)</b>			
EPA Subpart W Mandatory Reporting	—	0	0
Additional EPA Supart W Facilities	—	0	0
Other Sources (3)	—	14	9
<b>Total HFS</b>	<b>—</b>	<b>14</b>	<b>9</b>

	2021	2022	2023
<b>Scope 2 Greenhouse Gas Emissions (Metric Tons CO<sub>2</sub>e-AR5)</b>			
Total Seneca	404	463	546
Total Highland Field Services	130	607	1,151
<b>Scope 1 &amp; 2 Emission Intensity (kg CO<sub>2</sub>e/BOE)</b>			
<b>Seneca</b>			
Greenhouse Gas Emissions Intensity	4.32	3.67	2.87
Methane Emissions Intensity	2.58	1.96	1.39
<b>NGSI Intensity %</b>			
<b>Seneca</b>			
Methane Emissions Intensity – NGSI	0.083%	0.063%	0.044%
<b>Production Data</b>			
<b>Seneca</b>			
Production (MBOE)	61,712	66,937	71,775
<b>Criteria Pollutants Emissions (Metric Tons)</b>			
<b>Seneca</b>			
NO <sub>x</sub>	456.86	503.58	313.22
PM <sub>10</sub>	14.77	16.25	12.23
SO <sub>x</sub>	0.81	0.82	0.72
VOC	48.93	49.04	53.63
<b>Highland Field Services (All)</b>			
NO <sub>x</sub>	—	96.98	36.94
PM <sub>10</sub>	—	5.57	3.05
SO <sub>x</sub>	—	9.68	9.17
VOC	—	29.05	15.74

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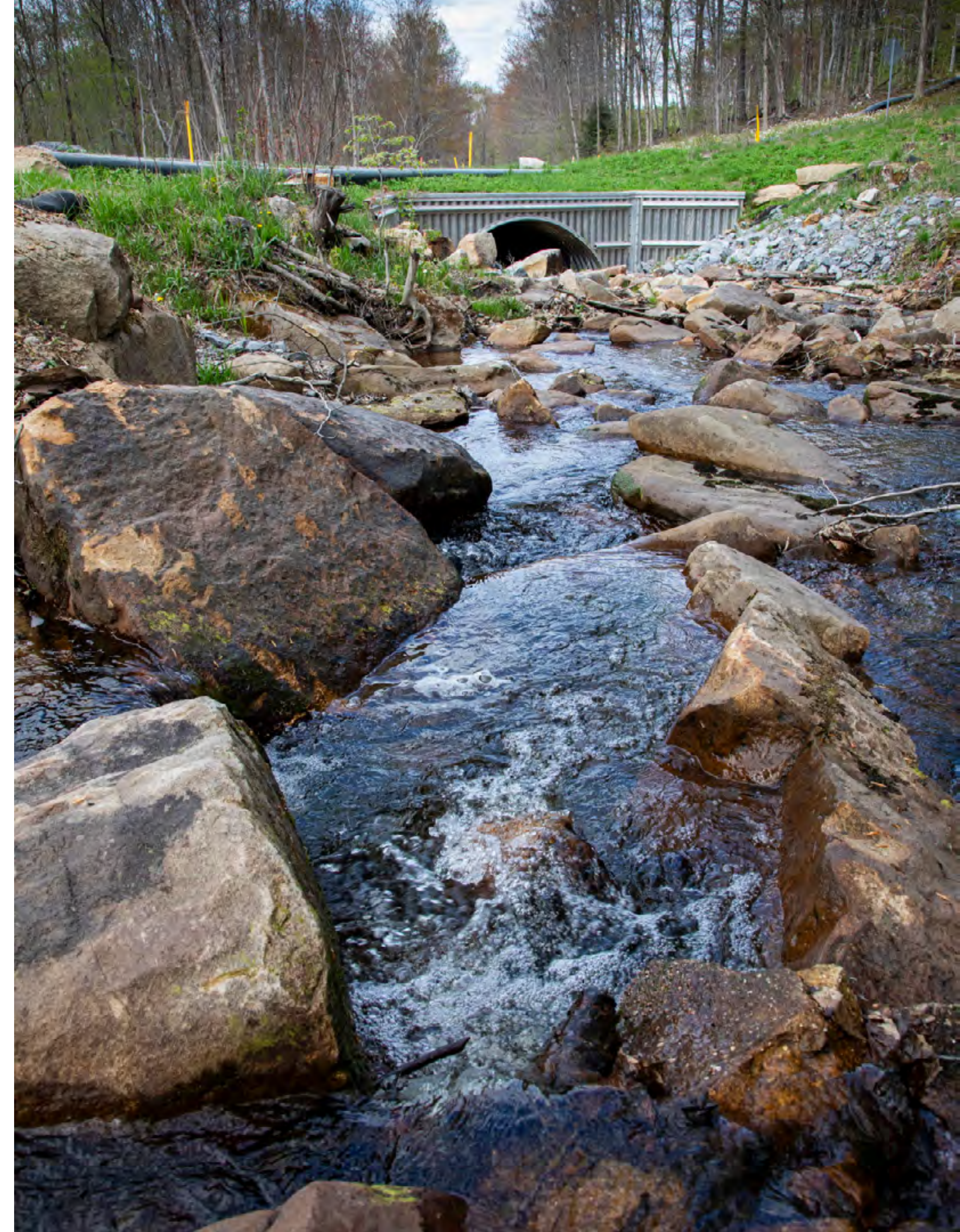
## Upstream Segment (continued)

	2021	2022	2023
<b>Freshwater Withdrawn and Freshwater Consumed (Thousands of Cubic Meters)<sup>1</sup></b>			
Total Water Withdrawn	1,149	1,686	1,564
% of Water from Locations with High or Extremely High Water Risk	0%	0%	0%
Total Freshwater Consumed	1,167	1,696	1,070
% of Water Consumed from Locations with High or Extremely High Water Risk	0%	0%	0%
<b>Volume of Produced Water and Flowback Generated (Thousands of Cubic Meters)<sup>2</sup></b>			
Produced Water and Flowback	1,620	1,764	1,811
% Discharged	0%	0%	0%
% Injected for Disposal	7.4%	9.7%	8.0%
% Recycled	92.6%	90.3%	92.0%
<b>All Non-Hazardous Waste<sup>3</sup></b>			
Liquid Waste (Bbls):			
Injection		284	864
Landfilled		—	—
Recycled		1,514	444
Reuse/Recovery		345,350	362,325
<b>Total</b>		<b>347,148</b>	<b>363,633</b>
Solid Waste (Metric Tons):			
Injection		—	—
Landfilled		88,280	81,888
Recycled		42	25
Reuse/Recovery		0	27
<b>Total</b>		<b>88,322</b>	<b>81,940</b>

<sup>1</sup> Freshwater withdrawn and consumed is tracked and reported to the PA DEP and Susquehanna River Basin Commission.

<sup>2</sup> Produced, injected and recycled water volumes are measured and recorded daily as per standard field operating procedures, and are reported to PA DEP.

<sup>3</sup> Waste Management values include data from both Seneca and Highland Field Services. The Company began quantifying its Waste Management Program in 2022.





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## Appendix E: GRI Standards by Topic<sup>1</sup>

Topic	GRI- Referenced Codes
Company Overview	2-1; 2-2
<b>Governance</b>	
Board Diversity and Independence	2-9; 2-10; 2-11
Investment Community Engagement	2-12; 2-29
Leadership and Governance – Business Ethics	2-15; 2-16; 2-23
Governance – Political Advocacy	2-28
Governance of Corporate Responsibility and Sustainability	2-9; 2-12; 2-13; 2-14
Management of Climate-Related Risks and Climate Strategy	2-22; 2-27
<b>Environmental</b>	
Greenhouse Gas Emissions and Air Quality	305-1; 305-2, 305-4, 305-5, 305-7
Ecological Impacts and Biodiversity Protection	304-1, 304-3
Water Management and Integrity	303-1; 303-3;
Waste Management	306-5; 306-6
Project Planning and Development	2-29
<b>Safety</b>	
Employee and Contractor Safety	403-5; 403-9
Compliance, Training and Development	404-1
<b>Social</b>	
Employee Attraction and Retention	401-2; 401-3
Employee Demographics	401-1
Building an Inclusive Workplace	2-30
Serving Communities	413-1

<sup>1</sup> The Company references governance and social codes where disclosures aim to align with GRI, as certain metrics are not covered under industry-specific SASB standards.





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**Independent Third-Party Verification of Emissions Data**

# Appendix F:

## Independent Third-Party Verification of Emissions Data



### VERIFICATION STATEMENTS FOR NATIONAL FUEL UPSTREAM, MIDSTREAM, AND DOWNSTREAM REPORTING FOR REPORTING YEAR 2021, 2022, AND 2023

National Fuel Gas Company (National Fuel) is a diversified energy company engaged principally in the onshore exploration and production, gathering, transportation, and distribution of natural gas. The Company operates an integrated business, with assets centered in New York and Pennsylvania. National Fuel reports their greenhouse gas (GHG) emissions pursuant to the U.S. EPA 40 CFR Part 98 Subpart W reporting requirements. Additionally, National Fuel reports Criteria Pollutant Emissions annually. National Fuel enlisted the services of Tetra Tech, Inc. (Tetra Tech) to perform a review of their reported 2021, 2022, and 2023 reporting year emissions for their Upstream, Midstream, and Downstream reporting segment processes.

The National Fuel limited assurance review was done by an independent third-party auditor to review submitted emissions, reporting methodology, and process flow to ensure no material misstatement or nonconformances occurred for the 2021, 2022, or 2023 reporting years. The verification body that conducted the GHG assurance review is certified by both the California Air Resources Board (CARB), the Oregon Department of Environmental Quality (DEQ), and State of Washington Department of Ecology (Ecology). While National Fuel is not required to comply with CARB requirements, the methodology contained with the CARB Mandatory Reporting Regulation (MRR) is robust and includes specific requirements for data review and reporting. The approach contained within 40 CFR Part 98 and guidance provided within the CARB MRR were utilized for the assurance review of National Fuel with the approach specifically tailored for National Fuel's reporting requirements. Tetra Tech's report presents the results of the assurance review process for the 2021, 2022, and 2023 reporting years.

The verification body has conducted a review of the submitted GHG, Methane, and Criteria Pollutant emissions for both the Pennsylvania and New York facilities for the 2021, 2022, and 2023 reporting years for the Upstream, Midstream, and Downstream reporting segment processes. A review of raw data utilized to calculate these submitted emissions, backup documentation, prepared Monitoring Plans, data management systems, and site interviews with key reporting National Fuel staff was conducted. Additionally, the verification body reviewed National Fuel's Corporate Responsibility Reports. The reports detailed the Upstream, Midstream, and Downstream processes and discussed all aspects of National Fuel's impact, from GHG emissions to biodiversity impacts. During the verification process, all questions and issues were reviewed and discussed with National Fuel, and all issues were closed out.

Per the CARB MRR, "material misstatement" means any discrepancy, omission, or misreporting, or aggregation of the three, identified during verification services that leads a verification team to believe that the total reported covered emissions (metric tons of CO<sub>2</sub>e) or reported covered product data contains errors greater than 5%, as applicable, in an emissions data report. Additionally, "nonconformance" means the failure to use the methods or emission factors specified in this article to calculate emissions, or the failure to meet any other requirements of the regulation.

The verification body has found the submitted emissions reports free of material misstatement. In addition, the verification body also attests that the National Fuel reports conform to the requirements of the regulation.

Certified by:

Erica Alvarado, D.Env., M.P.H.

CARB, OR DEQ, and Ecology Accredited Greenhouse Gas Lead Verifier with Oil & Gas and Transactions Specialties

**Tetra Tech, Inc.**

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# National Fuel<sup>®</sup>

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