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Redefining power by:

- Focusing on customers
- Embracing energy choice
- Leading the way in decarbonization

Driven by the destination

This year marks our 10th annual sustainability report. Over the past decade, NRG has grown and evolved into the stronger, more resilient organization it is today. As I have shared in the past, I believe that our comprehensive sustainability framework is the foundation for our continued success, today and into the future.

As a power company, we recognize the critical role we hold in the lives of our customers, and also in our ability to decarbonize as a country. We understand how our stakeholders' interests converge on the path to long-term value creation — from our employees and customers to our communities and investors. To enable a sustainable energy future for everyone, we have spent the last four years incorporating comprehensive sustainability throughout the company.

In 2019, we made significant progress toward our goals and commitments while also raising the bar by:

- Expanding our sustainability program and accelerating our greenhouse gas (GHG) emissions reduction goals to align with the Intergovernmental Panel on Climate Change 1.5 degree imperative
- Improving our financial resilience and providing clarity of our path to value to our shareholders
- Contracting more than 1.6 GW of renewables for our customers, with plans for more
- Refreshing our company values, including elevating diversity and inclusion and integrating health and well-being into our safety commitment

Our heightened operational and financial resilience, and an increased focus on employee and community wellness, are proving invaluable as we face the COVID-19 pandemic. Our purpose to bring the power of energy to people and organizations means a little more today. We provide a vital resource, one that keeps people connected, comfortable, and safe. That's why we have adapted our means of work to ensure that our people — our most valuable asset — are protected so that they can keep the lights on and serve the millions of American healthcare workers, families, and businesses who are depending on power during this challenging time.

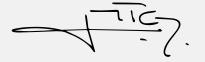
In many ways, addressing climate change is a challenge analogous to COVID-19. Its worst impacts will indiscriminately travel the globe, redefining the 'new normal' for communities and economies. Swift and collective action is necessary to change this trajectory. We're doing our part. In the past 10 years, we've reduced our carbon emissions by more than 40 million metric tons — the equivalent of taking 9 million cars off the road. We are 83% of the way to our 2025 GHG emissions reduction goal, with a clear line of sight to achievement.

We also believe that empowering customers is the cornerstone of decarbonizing the

economy and achieving a clean energy future. For example, as they select cleaner sources of electricity, we continue to provide plans that make access to renewable power simple and affordable. Our brands are using technology to facilitate a customized energy experience, so customers can have more control of their electricity usage — and its associated carbon footprint — than ever before.

Redefining power is how NRG describes forward momentum in the power sector. When we embrace change and evolve,

we enable progress and innovation. Our unwavering commitment to our purpose underpins our pursuit of a more sustainable future. We do this for our employees, customers, communities, and investors. Our priorities have never been clearer, and the future is full of opportunity. Let's redefine power, together.



President and Chief Executive Officer





Working toward a clean energy future

NRG is always looking to meet the needs of

the present. Amidst the novel coronavirus

crisis, fulfilling these needs has meant

ensuring that electricity is delivered

safely and reliably to our customers,

including healthcare facilities, local

on ensuring that future generations

businesses, and individual citizens. And

yet, at the same time, we remain focused

maintain the ability to meet their needs, by

decarbonizing and operating sustainably.

Sustainability is "meeting the needs of the present without compromising the ability of future generations to meet their own needs."* As a long-time sustainability professional, I believe this concept is particularly poignant, especially when we regard the role electricity has taken in our economy.

 Making renewables seamless for customers

forward by:

Moving

 Remaining steadfast in our own reduction targets

 Becoming an industry voice for change and choice When I joined NRG seven years ago, we were developing our absolute emission reduction goals, which proved to be one of the first certified science-based targets in the world and the most aggressive goal of any power company at that time. Now, in our tenth sustainability report, we affirm even more aggressive GHG reduction goals.

Last year, we were presented with the Intergovernmental Panel on Climate

Change's updated recommendation to limit warming to a 1.5-degree scenario. We immediately recognized the opportunity to deepen the ambition of our goals. In September 2019, we announced our pledge to achieve a 50% reduction by 2025 and net-zero by 2050, from a 2014 baseline. This is a significant stake in the ground for an integrated power company like NRG. We aren't just switching out a fuel source; we are fundamentally shifting our business to meet customer desires and align with the best available science.

More broadly, 2019 was a pivotal year for climate commitments and accelerated action on environmental, social, and governance (ESG) issues. As ESG reporting evolves, NRG continues to engage organizations and standard setters to determine the most useful decision frameworks. Creating the full cost-of-capital accounting that is required to finance the transition to a low-carbon economy is challenging but critical. We remain committed, and this represents our fourth-year reporting with the Sustainability Accounting Standards Board (SASB) alongside our voluntary reporting with/ through the Global Reporting Initiative (GRI) Standards and CDP questionnaires.

Our work with the Task Force on Climaterelated Financial Disclosures (TCFD) also continued in 2019 with further analysis of our scenario planning results. We intend to report our first TCFD-aligned report in late 2020, after revising some scenarios based on the unprecedented challenges the world is facing today.

There has been no clearer evidence that health, energy, and the economy are inextricably linked. As we face the challenges ahead, armed with data and a commitment to collective action, I am confident we can surmount the current crisis and stave off others. We will continue to meet the needs of both the present and future.

What we present to you in this, our annual Sustainability Report, is a testament to that commitment. We thank you for taking this journey with us and look forward to working together to create a clean energy future.

Land Placed

Laurel PeacockDirector, Sustainability



* UN Bruntland Commission, 1987

Our purpose statement

We are an energy company powered by people and built on dynamic retail brands with diverse generation resources.



We bring the power of energy to people and organizations.

NRG: At a glance



50 States (plus D.C.)

where we do business

FORTUNE

company

Over **4,500**

full-time employees

4

69 TWhs

served by retail

Approximately 3.7 million

customer

V\$

Over

30 assets

in eight states



Over

\$9.8 billior

in revenue



Procured

of renewables

Our values

Safety and Well-Being



Customer-Focus



Collaboration



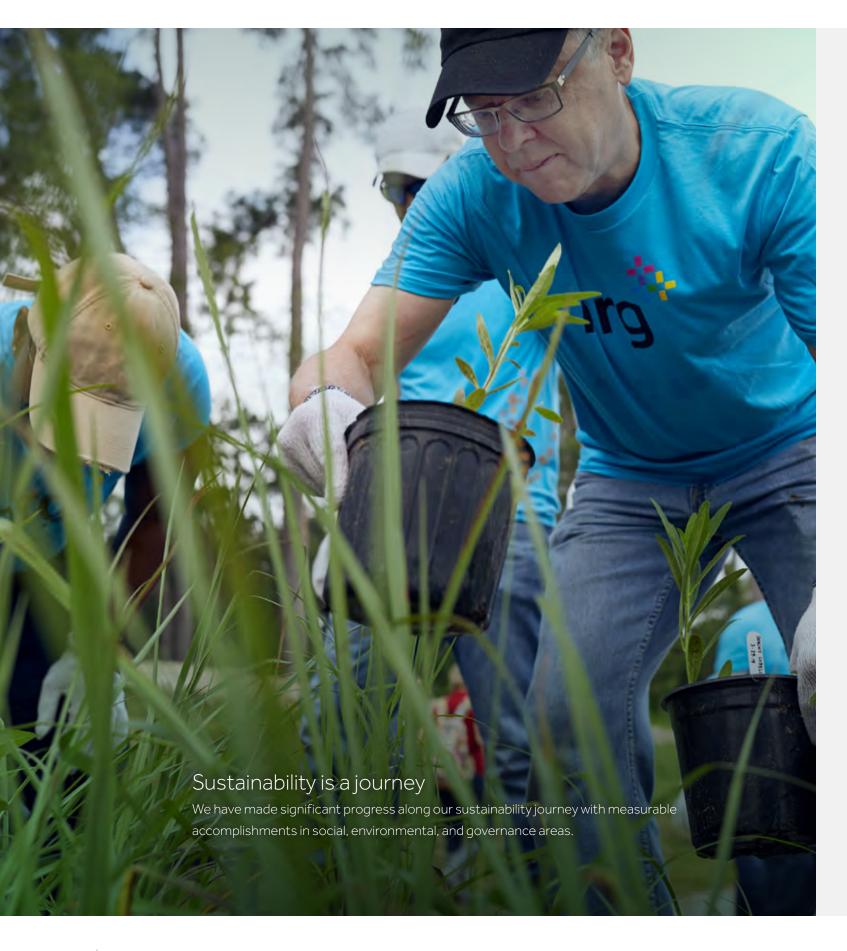
Accountability



Inclusion and Diversity



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Performance snapshot



41% total GHG emission reduction since 2014



of the way to

our 2025 greenhouse gas (GHG) reduction goal from a 2014 baseline



26% revenue carbon intensity decrease since 2015



<25% coal revenue

in our generation portfolio



portfolio

~23 GW generation capacity

in our North America

0.49 TCIR¹ best ever safety record



7
facilities
with VPP Star rating



philanthropy

\$3.2 million donations given through corporate

11,273
volunteer hours

13

prporate contributed by NRG employees

¹ Total Case Incident Rate

Sustainability at NRG

Our comprehensive approach to sustainability is one of five primary focuses of the NRG business strategy, further reinforcing the commitment to integration across all business functions.



Leading retail brands



Purposeful generation



Predictable earnings + strong FCFbG



Disciplined capital allocation



Comprehensive sustainability + strong governance





Our sustainability strategy

For us, sustainability is a philosophy that underpins and facilitates value creation across our business and for all of our stakeholders. It is an integral piece of our corporate strategy and ties directly to business success, reduced risks, and reputational value. To help embed corporate responsibility into the culture and fabric of the organization and create a sustainable energy future, we prioritize our work into five key pillars: business, customers, suppliers, operations, and workplace.



Sustainable business

This pillar guides our company in the foundational aspects of strong sustainability leadership around areas including governance, transparency, reporting, and stakeholder engagement.



Sustainable customers

A key aspect of our sustainability strategy is providing solutions for our customers and helping to lead the transition to a more sustainable future. Our goals are to provide more clean energy choices and help reduce the overall environmental impacts associated with the energy use of our customers.



Sustainable suppliers

It is important for companies to address sustainability in their entire value chain. We have established ambitious goals and started to put systems in place to measure and ultimately reduce the impacts in our supply chain. We are one of the first companies in the power sector to include elements of our supply chain in our sustainability commitments.



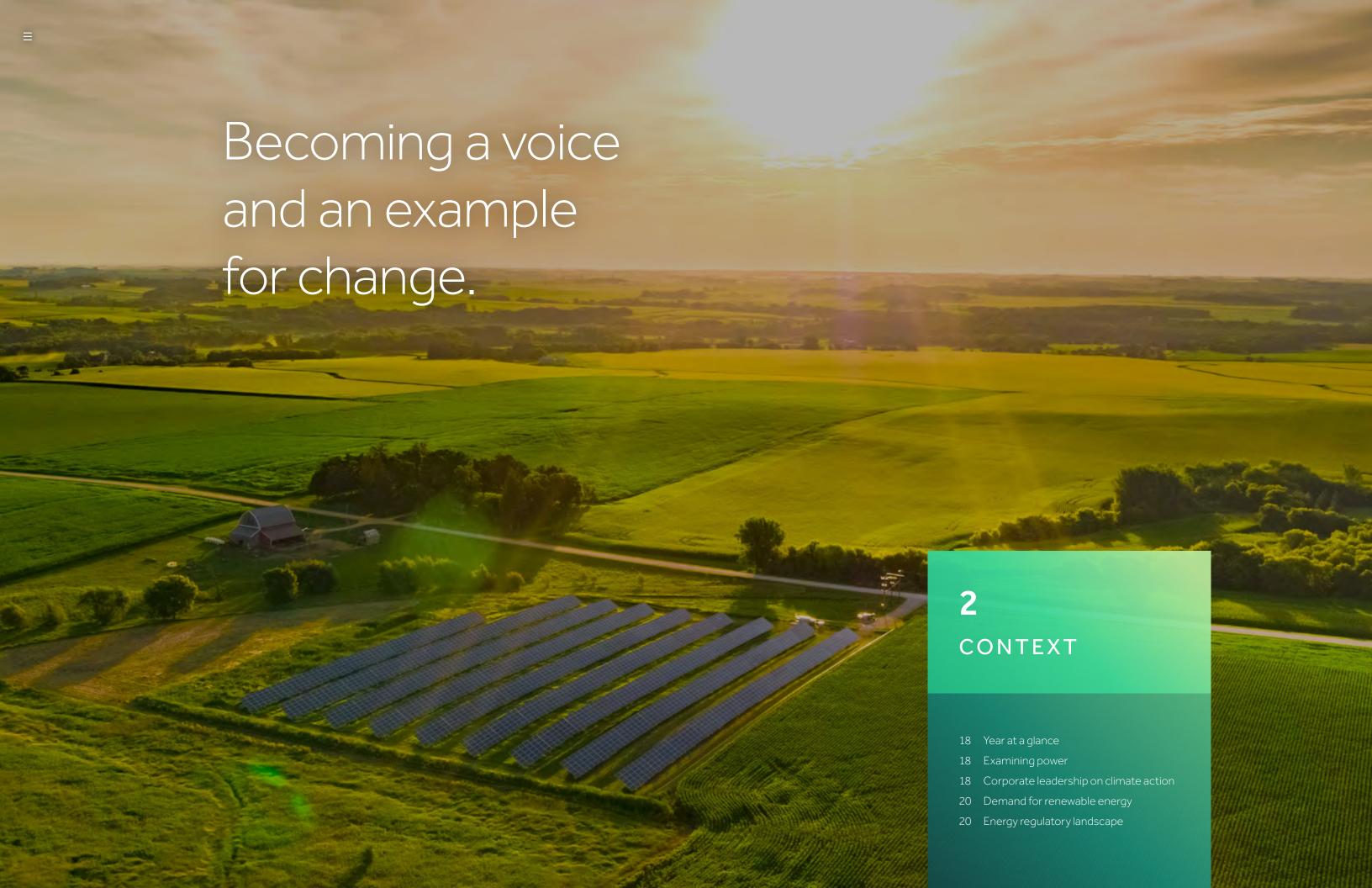
Sustainable operations

We are committed to reducing impacts across all of our company's operations and generation assets. Our commitment to sustainable operations includes achieving our science-based greenhouse gas target, increasing recycling rates of coal combustion residuals, and improving environmental performance across all facilities.



Sustainable workplace

The key to our company's success in working toward and achieving our sustainability goals across the value chain is having a strong, healthy, and engaged workforce to lead our organization. Our commitment to a sustainable workforce includes a focus on worker safety, health and wellness, equity, diversity and inclusion, and employee engagement, as well as environmentally conscious workplaces.



Key insights:

- Access driven by technology
- More companies stepping up on climate goals
- Societal impacts recognized as key to a company's value

The year at a glance

Electricity is everywhere. Technology, innovation, comfort — the hallmarks of modern life — are only possible with access to power. In 2019, we saw the pursuit of clean energy by municipalities, states, and corporations continue to grow. Commitments to cleaner and more resilient power have implications that shape electricity markets as regulators and policymakers respond to this accelerating demand. These efforts have resulted in a fragmented policy patchwork that varies state to state, which may impact how the power sector will continue to meet its societal obligation to provide safe, reliable, affordable, and now clean and customized energy. In order to position ourselves for success in the future and continue to provide our customers with this vital service, we monitor the trends occurring in our sector and beyond, and assertively contributed to the discourse.

Examining power

Corporate leadership on climate action

With increasing pressure from investors, customers, and employees, corporations are continuing to set climate goals to reduce environmental impacts. In 2019, over 8,400 companies disclosed their

carbon emissions to the CDP, a global nonprofit. This reflected a 20% increase over the previous year.² Not only are the goals increasing, but the ambition is, too. Based on the scientific consensus of the intergovernmental Panel on Climate Change, a net-zero goal by 2050 is what the world needs in order to limit global warming to 1.5 degrees Celsius and avoid the worst impacts of climate change.

In August 2019, the Business Roundtable, an association of chief executive officers, of which we are a member, updated its Statement on the Purpose of a Corporation to include "create value for all our stakeholders."³ This action demonstrates that business leaders recognize that all stakeholder interests are interrelated. The economic and social benefits of addressing contributions to society continue to gain public recognition.

Corporate support for climate action continued in December 2019 when companies and unions that employ and represent more than 2 million people in the United States signed the United for Paris Agreement, a letter urging the U.S. to stay in the agreement. This action came in response to the official withdrawal in November 2019.



https://www.cdp.net/en/companies/companies-scores https://opportunity.businessroundtable.org/wp-content/uploads/2019/08/BRT-Statement-on-the-Purpose-of-a-Corporation-with-Signatures.pdf

SUSTAINABLE CONTEXT

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Energy market in 2019:

- Corporate clean energy buying up 44%
- Complex regulatory landscape creates challenges
- Marketplace choice can be a catalyst for clean energy growth

Demand for renewable energy

2019 was another record-setting year for renewable energy deals. Global corporate clean energy buying increased 44%, resulting in 19.5 GW of cumulative volume.4 The U.S. accounted for 13.6 GW of that volume. BloombergNEF notes that these technologies are more cost-competitive than ever.

We see this as another indication that businesses are seeing the opportunities, and the risks, of climate change. More and more, our customers are asking for renewable energy solutions and, with the growing requirements around climate-risk reporting, we see the demand continuing to grow.

Not only are individual companies demanding clean energy, but cities and states are as well. As of late 2019, 29 states and hundreds of cities had passed laws or adopted cleanenergy standards for the power sector — six of those states and 133 of those cities have announced their intention to completely

U.S. corporate renewable deals



226 RE100 companies have made a commitment to go 100% renewable.⁵

eliminate carbon emissions from the power sector over the next two to three decades. The Sierra Club estimates that one in four people in America live in a community that has declared a 100% emissions-free goal.6

Energy regulatory landscape

Like all participants in the wholesale and retail energy markets, we are subject to regulation by various federal and state government agencies. Today's energy regulatory landscape is complex and crowded, but for the U.S. to decarbonize there will need to be strong policy signals that allow for competitive and clean options.

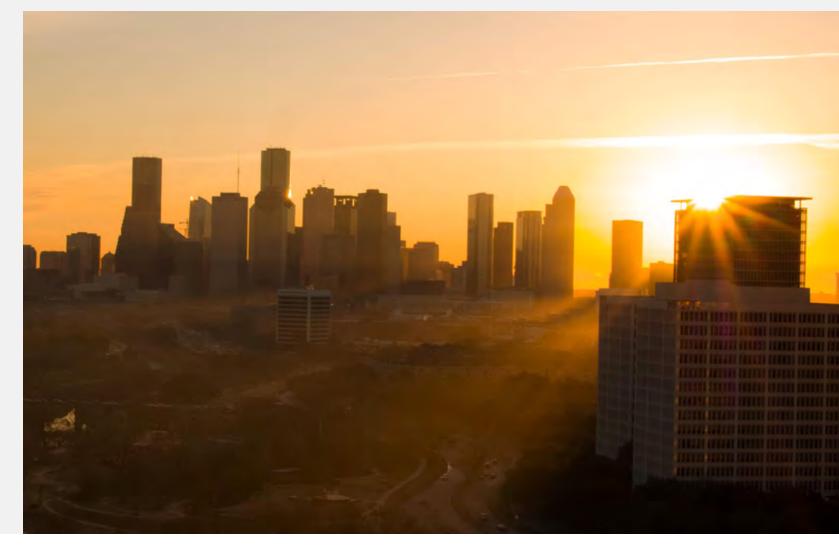
The unintended consequence of regulators and policymakers at the state level working to accelerate decarbonization is a patchwork of policies that vary by market. The fragmentation creates a challenging environment for those developing and investing in energy technologies, an issue that is exacerbated by actions to subsidize specific technologies, namely coal and nuclear, impacting the natural attrition of aging and uneconomic facilities.

We continue to oppose technology-specific subsidies and support a competitive cleanenergy market design that would reduce greenhouse gas emission through the procurement of clean-energy resources without sacrificing the consumer benefits of the competitive market design.

Specifically, in addition to supporting an economywide price on carbon, we advocate for three important initiatives, which we believe would accelerate the modernization of the power sector:

- A right of customers to buy clean energy from a provider of their choice
- An auction-based process that brings customers and producers together for the procurement of clean energy
- Elimination of barriers that prevent customers from doing business across utility boundaries by requiring interconnection to an independent system operator to form a wider regional grid

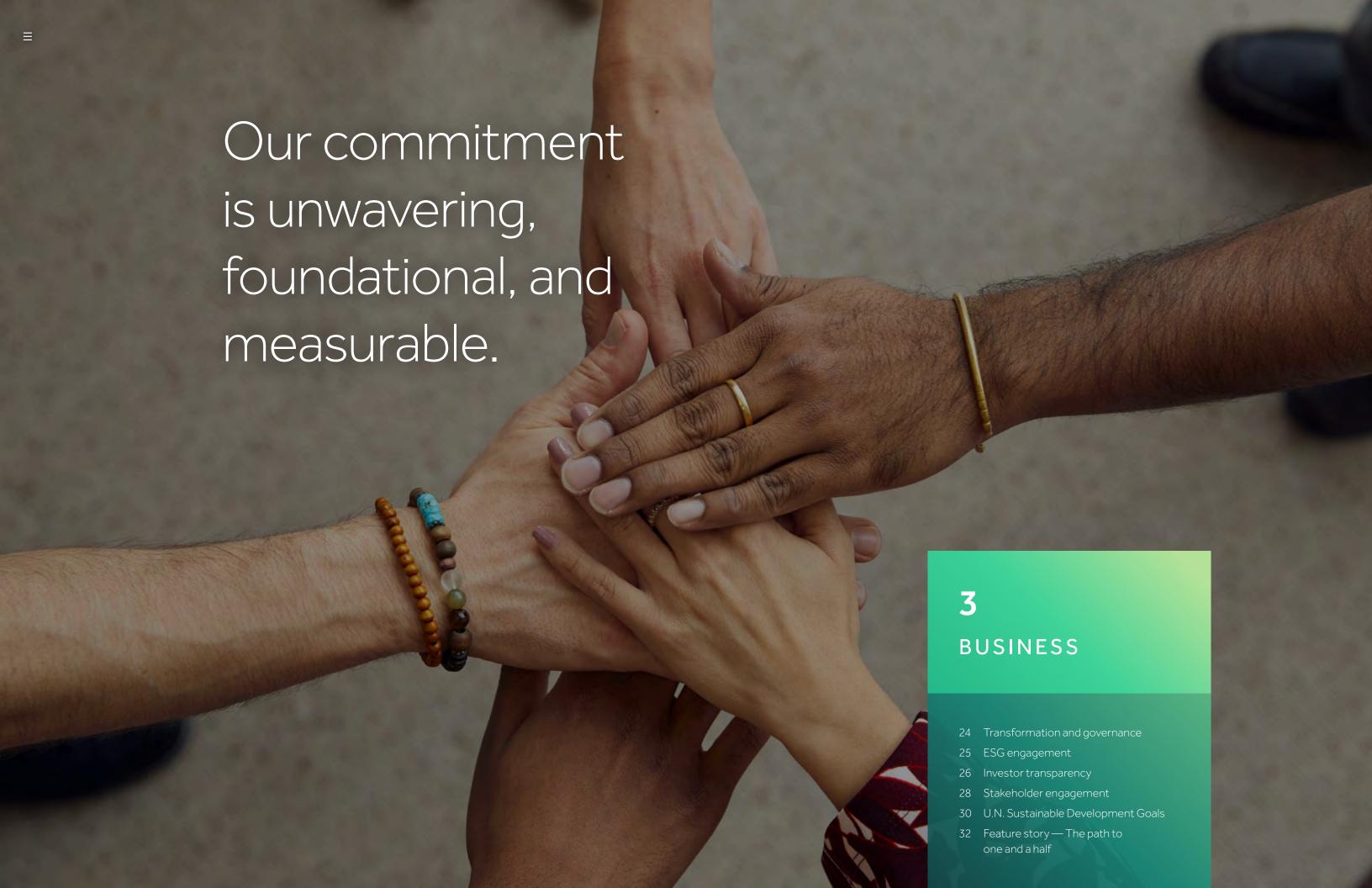
If done right, these concepts together could create a vibrant energy marketplace where customers are empowered to choose the source and provider for their energy, greatly reducing the cost of decarbonization through competition.



https://www.renewableenergyworld.com/2019/10/29/reba-corporate-renewable-energy-buyers-set-new-record-in-2019/#gref

https://www.sierraclub.org/readv-for-100

http://there100.org/companies



SUSTAINABLE BUSINESS

A corporate structure for success:

- Supports a customercentric strategy
- Reflects our overall diversity goals
- Fosters engagement with key stakeholders

Redefining energy with a plan and structure to make it happen

We are transforming as a company along with our sector. In 2019, both evolved in significant and impactful ways.

Transforming our company

Transformation at NRG began with a refreshed purpose backed by a specific plan for redefining our organization. We've made tangible progress in advancing the idea of what a power company can mean in the lives of customers, while also providing meaningful long-term value to shareholders.

Governance at NRG

Transforming our company is backed by a strong governing structure that drives and supports all decision-making. In 2019, the Board continued its refreshment with the addition of two new directors. In addition, two existing directors retired. As a result, the Board is now composed of ten members, three of which are women, and three of which are ethnically diverse. A sustainability focus is supported by our Board chair, a Ph.D. scientist and strong proponent of this mission. In addition, the Governance & Nominating Committee is directly responsible for sustainability oversight. Its risk oversight focus areas include strategies and efforts to manage environmental, economic, and social impacts as part of our comprehensive sustainability policies and programs.



Board diversity



Reflects current 2020 composition

3 Women





3 Ethnically diverse



Independence

90% Independent (all except CEO) 90% Meet heightened committee independent standards

ESG engagement

We engage with our investors and the broader financial community on environmental, social, and governance (ESG) issues in a proactive, holistic, and integrated manner. In 2019, we continued to engage institutional investors and investor advocacy organizations around ESG issues. These meetings were held with NRG leadership, including Investor Relations, Sustainability, and our corporate secretary. This allowed us to share

and discuss key ESG issues, including governance, executive compensation, and board compensation, as well as environmental and social sustainability as it pertains to our overall company strategy. This approach encourages our investors to bring ESG analysts, proxy, and governance experts to meetings, resulting in our ability to address and unify these topics and demonstrate their importance to the overall company strategy.

Consecutive years committed to SASB standards

Investor transparency

We are committed to leading our sector in sustainability transparency and disclosure. We follow the leading globally accepted frameworks and standards in order to provide key information to all of our stakeholders, including being one of the first in our sector to use the SASB standard and to support the Task Force on Climate-related Financial Disclosures (TCFD) recommendations.

In 2017, the Financial Stability Board's TCFD issued recommendations for companies to help them inform their investors, lenders, and insurance underwriters on climate-related risks. This included information to identify material risks and opportunities to which companies are exposed. Investors and stakeholders are asking for climate scenario analysis as part of the TCFD framework. We support implementing the

TCFD recommendations and have committed to report in line with those recommendations. In late 2018 and into 2019 we engaged a third party to improve our futures thinking capability, including climate scenario analysis. A summary overview is expected to be published in late 2020.

2019 marked the fourth year we disclosed sustainability data using the SASB standards.

We strive to align SASB and TCFD where feasible. We believe the existing frameworks are complementary and serve to communicate key information to the capital market community. As the frameworks and standards continue to harmonize, we will stay engaged with stakeholders and adapt our ESG reporting accordingly.



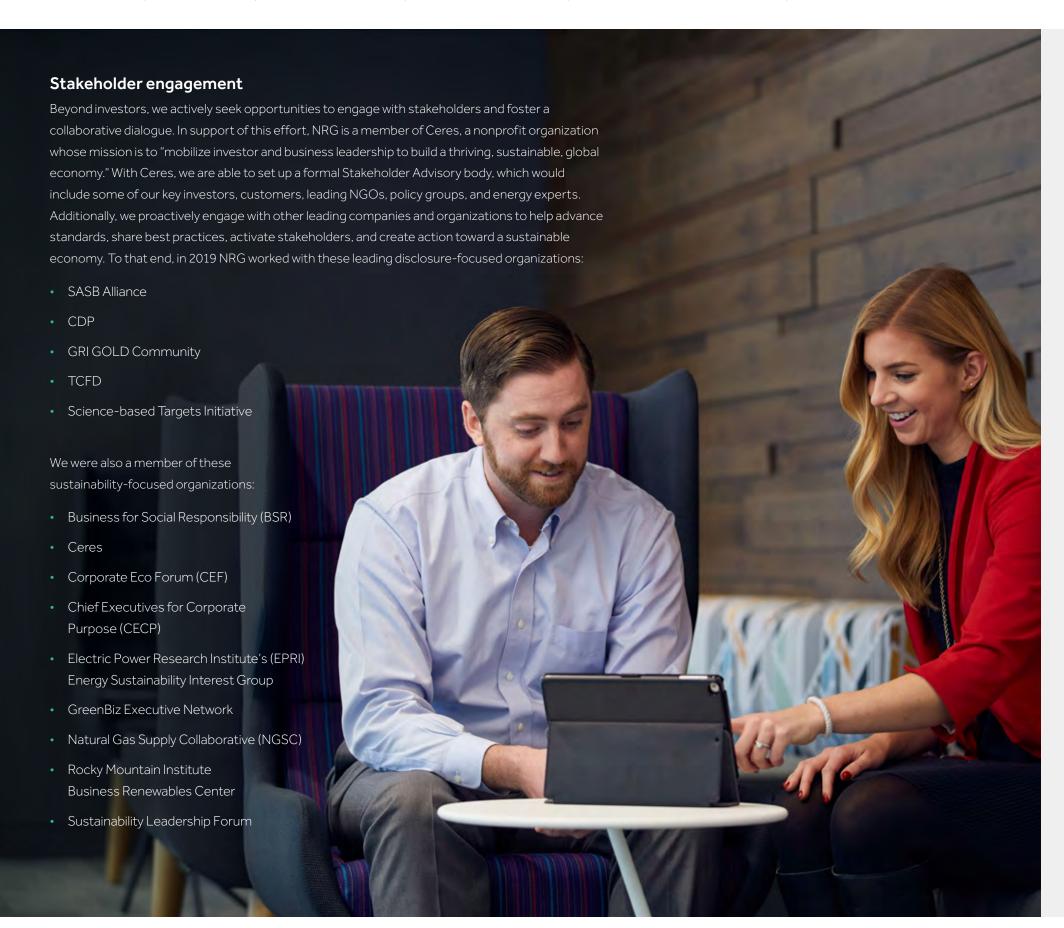
Sustainability Linked Loan

In 2019, we became the second U.S.-based power company to engage in an ESG-linked Ioan. This Sustainability Linked Loan (SLL) or ESG loan embeds a pricing mechanism linked to specific sustainability metrics. Our \$2.6 billion SLL is only the third such transaction for a U.S. power company. Although not as common in the U.S., demand is growing for this type of financing, which emphasizes a potential increased access to capital by demonstrating strategic longterm planning of corporate responsibility. Globally, the volume of ESG-linked loans in 2019 surpassed the more than \$40 billion issued worldwide in 2018.7 The key benefits of engaging in this loan are twofold: First, it further aligns our sustainability strategy and its financing needs through a pricing mechanism. Second, through a highly visible transaction it allows us to further demonstrate commitment to our goals.



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https://cib.bnpparibas.com/sustain/sustainability-linked-loans-giving-firms-incentives-to-improve_a-3-3013.html



We are also members of other organizations that support various parts of our business. We recently published a disclosure of our political lobbying as it relates to our memberships in organizations. For more information, visit www.investors.nrg.com/corporate-governance/highlights.

Throughout 2019, we continued to engage with policymakers in Washington, D.C., and at the state level. We also maintained our relationships with groups such as the National Climate Coalition, the Electric Power Supply Association, and various informal organizations. When possible, we collaborate with major environmental groups on clean energy access and climate solutions. Typically, we engage on legislative and regulatory actions designed to mitigate GHG emissions, as well as policies that foster the development and deployment of competitive low-carbon power generation technologies. We are most active in the debate aimed at protecting and expanding competitive power markets and consumer choice, both of which we believe are critical enablers of achieving cost-competitive low carbon outcomes. Learn more about our policy engagement efforts here.

Top 300 Newsweek Most Responsible Companies of 2019

Ranked 115 of 300, reflective of our commitment to engagement and reporting

1 NO POVERTY

Mr###

5 GENDER EQUALITY

SUSTAINABLE DEVELOPMENT

GOALS

13 CLIMATE ACTION

3 GOOD HEALTH

7 AFFORDABLE AND CLEAN ENERGY

U.N. Sustainable Development Goals

Sustainable

Goals

Development

Launched in 2015, the 17 Sustainable Development Goals (SDGs) are a global set of goals, targets, and indicators developed by the United Nations to guide countries, communities, and organizations in their work to create a sustainable world by 2030. These goals are intended to address all

aspects of sustainable development, spanning a wide range of environmental and social initiatives. Achieving the SDGs will require significant contributions from both the public and private sectors. According to a report by KPMG8, four in 10 of the world's largest companies are already referencing the SDGs

in their corporate sustainability reporting, which suggests that the interest in the SDGs from the business sector has been growing considerably since they were published in 2015. Though there is not yet a standardized process for corporate reporting on SDGs, we continually assess our business strategy and

operations to identify opportunities for a greater contribution toward the SDGs. While we recognize that making progress on all 17 SDGs is vital to creating a sustainable economy, we strive to focus our resources on the SDGs that are most closely tied to our business: 3, 5, 7, and 13.

Alignment with United Nations Sustainable Development Goals





Empowered Employees

- Power Up My Life employee engagement program offers fulland part-time wellness benefits
- Power Up nutrition platform offers free membership to three different weight management programs
- Non-tobacco user discount
- Support for mental well-being and work-life balance



Gender Equality

Power Values

- Diversity & Inclusion included in our values
- Internal program "Women in Power" aims to train female power plant workers for leadership roles
- Equal pay study

Governance

- Board of Directors increased diversity to 30% female
- Executive Management Team 22% female



Affordable and **Clean Energy**

Empowered Customers

- State-of-the-art retail brands and offerings
- Plans and solutions for all needs and budgets
- Advocate for competitive markets
- Champion of customer choice

Sustainable Products

- Flexible generation matched with retail
- Energy storage
- 100% renewable plans offered in all of our retail markets
- Demand response



Climate

Customer Solutions

- Lower GHG emissions
- Added resilience
- Sustainable energy consulting

Company Actions

- Aligned 1.5 degree Celsius GHG target
- Science-based target
- Carbon capture innovation
- Climate-Change Principles
- Commitment to supply chain engagement

* https://home.kpmg/au/en/home/insights/2018/02/how-to-report-on-the-sdgs.html

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Our long-standing, and deepening, commitment to carbon reduction

While the NRG carbon-reduction story began over a decade ago, our goal-setting strategy deepened in 2014. Our chief operating officer at the time (now president and CEO), Mauricio Gutierrez, was responsible not only for the safe and economic operation of our company's power fleet, but also for its environmental performance. For this reason, when the time came to set GHG emissions reduction goals, he was the natural choice to lead that steering committee.

From there, we sought to set a specific target that would unlock long-term business opportunities, including C&I partnerships with large companies that had supplychain sustainability goals of their own. At that time, the pending Clean Power Plan was base-case ambition, and the outcome of the upcoming Paris COP21 was the standard of goal-setting excellence. To be competitive and a sector leader, we knew our ambition had to exceed both.

With the desire to lead in mind, we established goals to reduce absolute GHG emissions 50% by 2030, and 90% by 2050. We were the first in our sector, and one of the first 10 companies in the world, to receive certification by the Science-based Targets initiative in 2015, an endorsement that our ambition aligned with what was needed to achieve the 2-degree warming limit necessary to avoid the worst effects of global climate change.

Progressing beyond our original goals

Our decarbonization efforts have progressed more rapidly than the rest of the U.S. power sector. Since 2010 we've reduced emissions by more than 50%, while the rest of the sector has reduced by 28% since 2005. As of December 2018 we had achieved a 37% absolute reduction in our GHG emissions, versus our 2014 baseline — placing our reduction trajectory well ahead of our 2030 goal.9

⁹ Numbers based on 2018 data

Our next phase of climate leadership

We pride ourselves in listening to the best science. When the Intergovernmental Panel on Climate Change (IPCC) revised its quidance to limiting warming to a 1.5-degree Celsius scenario, we took the immediate step of re-evaluating our goals, especially given that we were on track to meet our existing targets well ahead of schedule.

On September 24, 2019, we proudly announced the deepening of our already leading, scientificbased targets. Our new goals are now to reduce emissions 50% by 2025 on the way to net-zero by 2050, from a 2014 baseline.

As an organization that brings the power of energy to people and organizations, decarbonization brings with it new opportunities for us. Economywide decarbonization will largely depend on successful electrification of highemitting sectors like transportation and manufacturing. We believe the future of our sector is one where these customers have choices, and we want to be the organization they choose to partner with to achieve their goals.

Looking to 2050

In the nearer term, we have a line of sight to achieving our goals through continued optimization of our portfolio, along with its assets, merit order, and use.

To achieve long-term goals, like net-zero by 2050, will require new processes that weave in new technologies,

competitive capital, and smart, forwardthinking policy decisions. Our legacy experience and competitive DNA make us well positioned to capitalize on market opportunities as they become viable.

We're proud of our heritage in bringing new processes and technologies forward, both in our generation facilities and in other work environments. Each one is looked at with an eye on overall impact and commercial viability. Coal-to-gas retrofits, and battery storage can offer an important "insurance product" benefit to maintain reliability while enabling the widespread deployment of carbonfree renewable resources on the grid. Also where appropriate, we will retire facilities as they become non-economically viable.

U.S. CO₂e emission goals¹⁰ (MMtCO₂e²)



Communicating our progress

There's an old adage that says "If you can't measure it, you can't manage it." Climate goals come with a litany of reporting groups, worksheets, and standards. We've committed to best-in-class reporting principles to ensure that we're transparently accounting for our progress in a way that's comparable and decision-useful.

By leveraging best-available reporting standards like the SASB table and supporting the TCFD, we're translating sustainability action, climate risk, and opportunity to the financial community in a way that supports long-term decision-making.

It's important to note that our climate action isn't motivated by business opportunity alone. As an organization powered by people, we cannot ignore the social and societal benefits of being a leader in the power sector. We aren't just a power company, we're an organization composed of people, with friends and family members active in the communities where we live and work. Because of the work we do, we're afforded the unique opportunity to make a meaningful impact related to one of the biggest challenges of our lifetime. Not only do we have the opportunity, we have the resources, both technologically and strategically, to succeed.

Progress through action

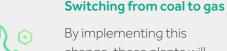
Retiring uneconomic units

By retiring units, total emissions from those units go to zero and contribute to our GHG goal.



Traditional generation as insurance products

By running plants less frequently, or by displacing the operation of older. less-efficient units, total emissions will decrease.





By implementing this change, these plants will burn more than 50% cleaner once switched.



Investing in new technologies

By embracing those that are smart, impactful, and energymarket driven.

¹⁰ https://sciencebasedtargets.org/2015/12/08/114-companies-commit-to-set-ambitious-science-based-emissions-reduction-targets-surpassing-goal/

¹¹ https://www.eia.gov/todavinenergy/detail.php?id=37392



Bringing sustainability home — easily, simply, seamlessly

Our retail electricity brands are embracing technology and using it to enable customers to take control of their energy and turn their homes into more efficient, more innovative, and more well-managed energy centers.

Along the way, that can mean significant and measurable reductions in usage and costs. For the electricity that homeowners do use, we're providing an ever-growing range of options that make it easy for them to choose renewables as their preferred energy source.

Active energy management

Google Nest partnership with NRG Retail brands

- Customers in select plans receive a Google Nest device¹²
- Voice-driven experience allows customers to easily view and manage energy with "voice-input, visual feedback" technology
- Earned two innovation awards in 2019

■ GOAL: EASY PATH TO AFFORDABILITY

Efficient energy relationships

Embracing a digital and paperless customer experience

- XOOM Energy 99% digital enrollment and billing
- Reliant Energy text-based enrollments launched in 2019
- Green Mountain Energy Texas Drivers carbon offset program for electricity customers to reduce carbon footprint (1.784 metric tons)
- NRG (Retail East) access for customers to alternative power solutions and home efficiency products

Range of renewable plans

Reliant Energy:

Expanding renewable portfolio

- Solar- and wind-based plans
- Tailored plan for electric vehicle owners
- Eco-Share plan offering carbon offsets

Green Mountain Energy: 100% renewable portfolio

- Rooftop Solar solar installation via partner companies, plus GME rebate and buyback program (11,000 customers in Texas = +93% in 2019)
- Solar Renewable Energy Credit-based products — +50K customers, Go Local Solar launched in Texas, and Solar SPAC continues to grow nationwide

9.3 BILLION POUNDS OF CO₂ AVOIDED BY GME CUSTOMERS IN 2019

Energy efficient products

Bringing sustainability home in tangible ways

- Reliant Smart Home store for Google Nest products
- LED light bulbs
- Air filter home delivery service

Transparency through technology

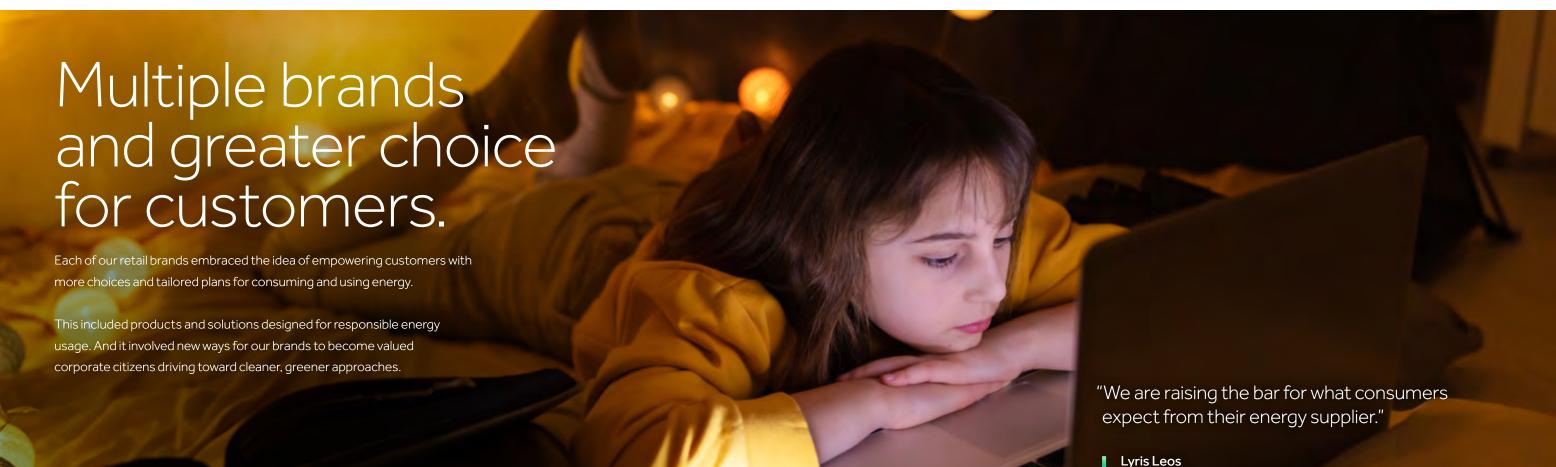
Launch of Green Mountain Energy App in 2019

- Intuitive interface screen shows customers their specific impact on the planet
- App awards badges when customers hit pre-defined CO2 offset milestones

Addition of carbon footprint calculator to GME website in 2019

- Allows prospects to calculate annual CO2 use
- Makes their potential clean-energy impact tangible

¹² Google and Google Nest Hub are trademarks of Google LLC.



Reliant Energy

Bringing smart energy approaches into homes and communities

Reliant Home Energy Snapshot

- In-home consultations and energy checkups
- Thermal cameras provide visual reinforcement and learning

Text on demand and enhanced alerts

- Market-based energy notifications
- Arming customers with knowledge and insight

Energy tips for lower bills and responsible usage

• Useful and timely information via online and call center representatives

Degrees of Difference program

- Customers agree to reduce usage during peak demand
- In return, they're rewarded for using less
- With smart thermostats, shifting energy is easier and seamless
- Helps communities better handle extreme temperatures and resultant energy spikes

Green Mountain Energy

Inspired by and inspiring communities

Partnering in sustainable energy:

- Texas Parks & Wildlife
- Empire State Building (NYC)
- Discovery Green (Houston)
- Sundance Square (Fort Worth)

Helping customers beyond electricity:

- Green Mountain Driver program
- Carbon offsets online store

2018 Retail Energy Provider of the Year:

 Recognized in 2019 by: energymarketingconferences.com

Goal Zero

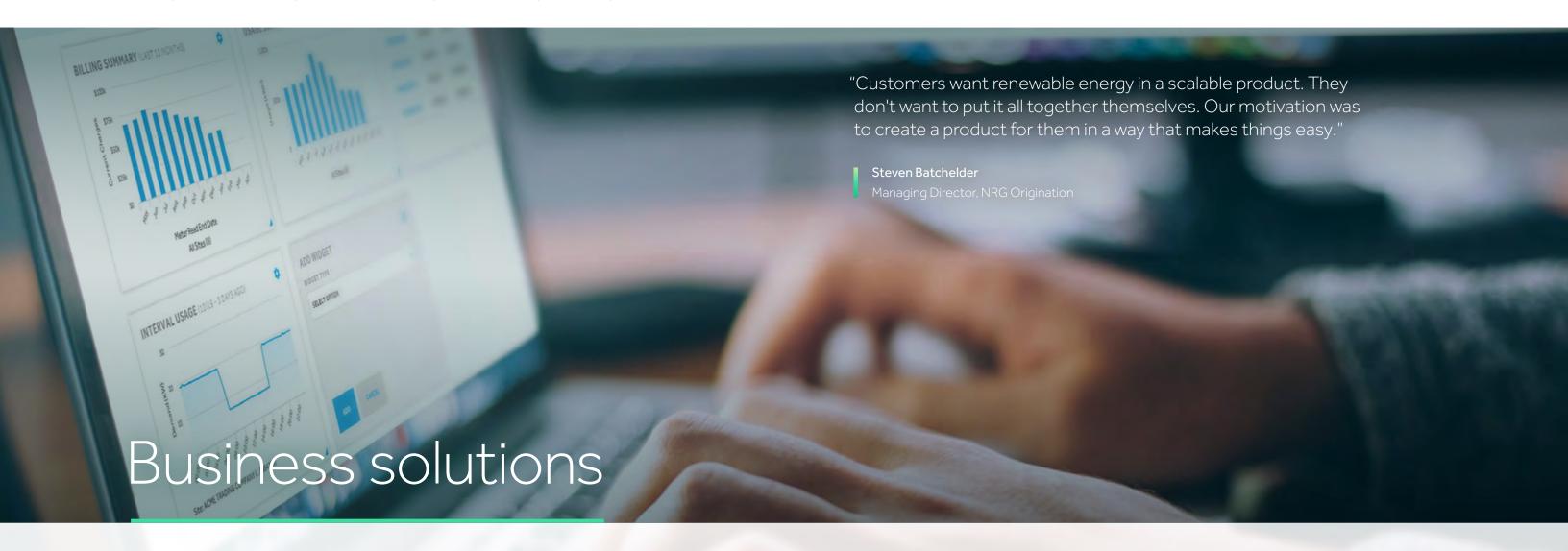
Sustainable, portable power products and an even more sustainable mission

Marketing Director, Reliant

Evolving to a more sustainable company in 2019:

- Installed 7.5K solar array to power operations
- Launched internal recycling initiative and in-house sustainability team
- Introduced lithium battery recycling program
- Converted from plastic to paper packaging trays

GOAL: 100% PLASTIC-FREE PACKAGING BY 2020



Creating a true business case for sustainability

Every business can appreciate the vision of a decarbonized, electrified, and renewably fueled energy future — and their place in making it happen. The challenge lies in getting there and turning a worthy goal into an achievable reality.

In 2019, our Business Solutions team continued to guide business customers down the path to sustainability. We did so by making it easy to discover the right solution for their situation, and arming them with the knowledge to take their energy approach to a higher level.

Clean, green, and simple

Renewable Select energy plan

- Solar without onsite panels
- · Packaged in a traditional electricity plan
- Less time, paperwork, and complexity

Other paths to simple, affordable, renewable energy:

- Community Solar brokerage
- Virtual Power Purchase Agreements (VPPAs)

1.6 GW SOLAR OUTPUT PROCURED IN 2019

Knowledge = responsible energy usage

Online Account Management

- Free energy portal for every customer
- Pay bills, track usage, discover trends, and manage energy
- Intuitive, paperless, and empowering

75% OF BUSINESS CUSTOMERS ENROLLED IN 2019

Six steps to energy efficiency

Proven process to guide customers to more efficient approaches

- 1 Outreach and dialogue
- 2 Preliminary energy-use analysis
- **3** Onsite audit
- 4 Post audit analysis
- **5** Efficiency recommendation
- **6** Services and execution

7.5 GWhs OF POTENTIAL SAVINGS IDENTIFIED IN 2019

RESIDENTIAL SOLUTIONS | BUSINESS SOLUTIONS | GENERATION AND SUPPLY | CUSTOMER FOCUS | RELIABILITY | RESILIENCE

The value of resilience

Our expertise is leading customers to greater levels of cost stability and resilience, expanding their view of what sustainability can mean in the process. In this way, we're bringing real-world value to businesses and communities, by showing them how to combat extreme climate events with reassurance and forward energy planning.

Here, our integrated business model as both a legacy power generator and a leading retailer gives us the perspective to recommend and implement integrated solutions that benefit energy users, grid managers, and the community at large. That's how complex challenges become sustainable solutions.

Collaborating to bring added reliability to customers and markets



A 5,000+ facility success story

Tailored demand response programs

- In-depth analysis of each customer's energy usage
- Personalized energy reduction plan
- Energy reduction when grid is stressed
- Inefficient generation no longer needed; new units not built
- Businesses use less, earn more, and contribute to a greater good

2.405 MW REDUCTION IN 2019

Expertise delivered

Certified Energy Managers (CEMs)

- 5 NRG employees earned CEM designation in 2019
- Sanctioned by the Association of Energy Engineers (AEE)

GREATER KNOWLEDGE = SMARTER ENERGY CHOICES

Distributed energy resources

Reassuring customers with energy independence

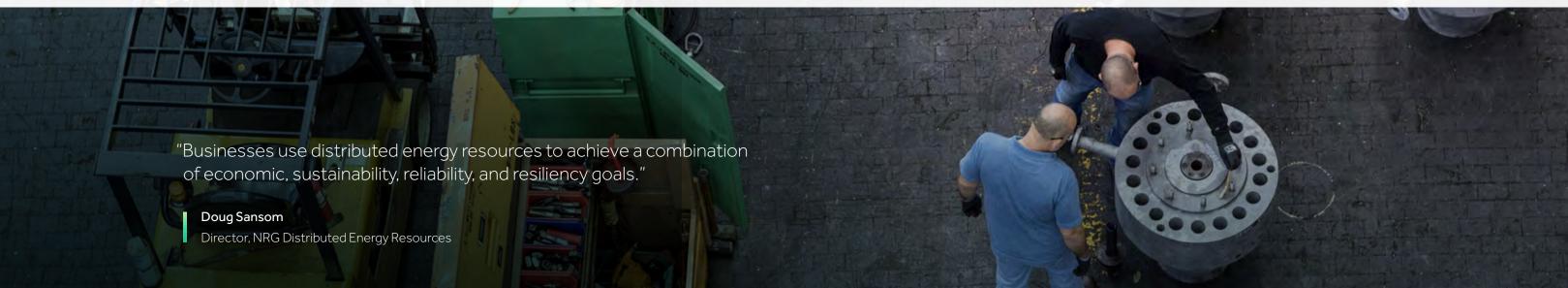
- Integrated energy systems
- Combine backup generation, demand response, and energy deployment
- Complete system managed, owned, and maintained by NRG
- Customers gain a reassuring level of energy independence

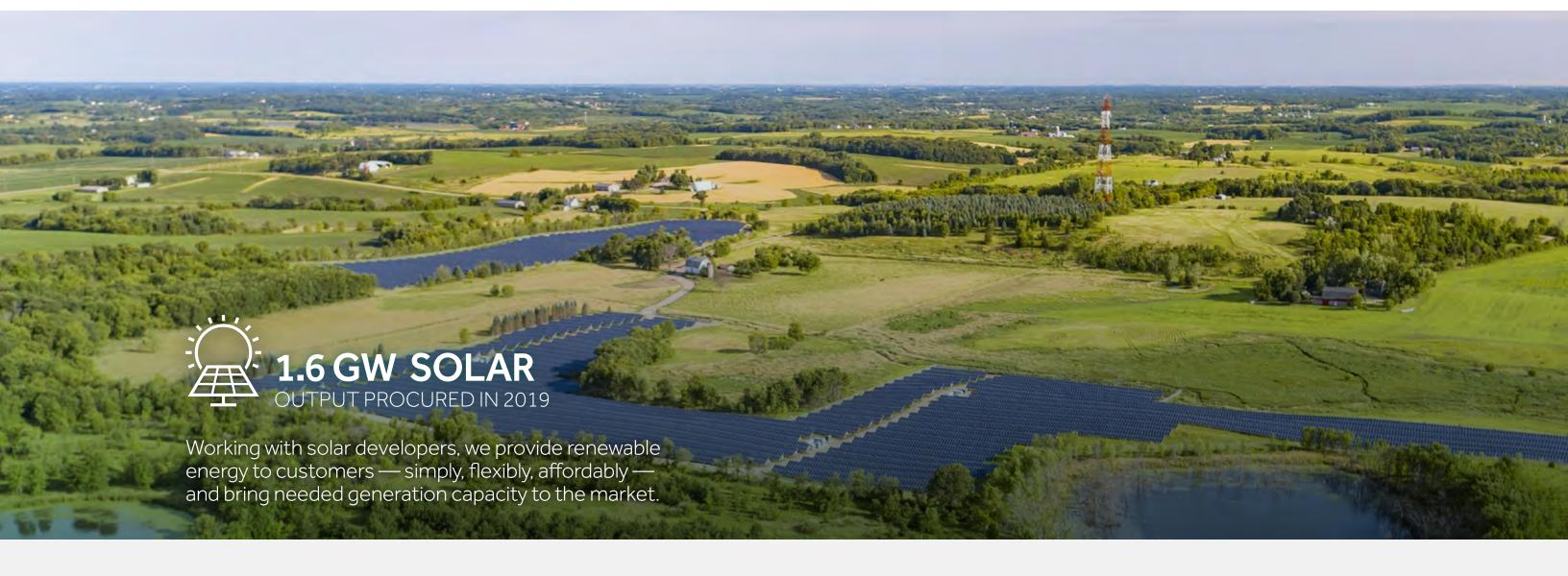
EFFICIENCY, RELIABILITY, STABILITY —NO UPFRONT COSTS

Electric vehicle partnership EVolve Houston

- Public/private partnership to boost electric vehicle sales in Houston
- City of Houston, NRG, Shell, CenterPoint Energy, LDR, University of Houston
- Driven by need to reduce per capita emissions (14.9 metric tons CO₂ equivalent)

HOUSTON'S GOAL: 30% EV NEW VEHICLE SALES BY 2030





Partnering with our customers

For businesses and organizations setting ambitious sustainability goals, our team is motivated to find innovative solutions to achieve them — easily, seamlessly, and affordably.

Our integrated platform leverages our experience working with customers, energy market leaders, and plant operators. We are well versed in

this ever-dynamic world and uniquely suited for turning complex challenges into well-executed solutions.

These solutions are often brought to market quickly, in months rather than years. One example: our Renewable Select energy plan that effectively helps customers achieve, strengthen, and exceed their long-term renewable-energy goals.

As the energy landscape shifts with large amounts of utility-scale renewables entering the market, we recognize that this is not a one-way street. Developers, too, are just as eager to supply the resources required to meet demand. We're serving as the bridge between producers and consumers, putting customized solutions in place with familiar structures that benefit both.

For us, being customer-focused means working for the good of all energy users, energy producers, grid managers, and ultimately, society as a whole. And the growing list of customers who are coming on board with us in this model is wide ranging — it includes retailers, manufacturers, educational leaders. financial institutions, and healthcare providers.

SUSTAINABLE CUSTOMERS

Generation and supply

We serve our customers' demand for electricity in a number of ways. Whether generating power from our fleet with diverse fuel sources and geographic proximity to our customers, purchasing power from the market, or entering longterm power purchase agreements for renewables, we're sourcing power in ways that meet our customers' needs and values.

The integrated approach to our business creates synergies that benefit everyone. The expertise we've gained from being a long-time participant in wholesale energy markets allows us to evaluate the market and optimize our offering for a myriad of conditions.

We have made significant progress in rebalancing our generation fleet in terms of scale, fuel type, and location to better serve our residential, commercial, and industrial customers. We know that our customers increasingly want sustainable energy solutions to reduce risk and enhance value. Our modern approach to renewables allows us to meet their needs while supporting our business strategy.

In June 2019, we brought back online a

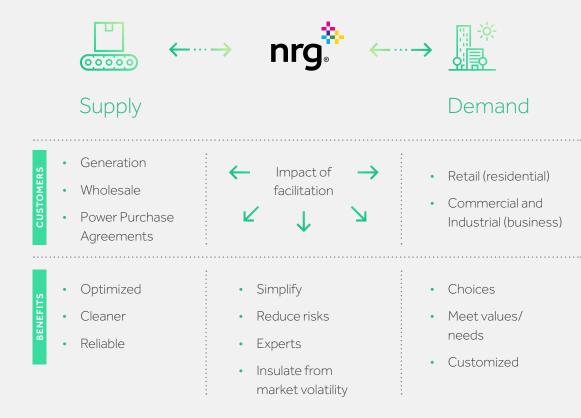
Customer focus

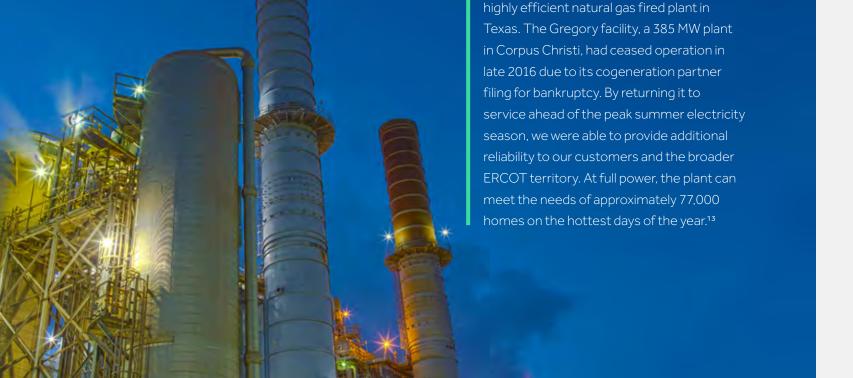
Today, we proudly serve our customers in our increasingly digital society, where reliable electricity is critical to our modern lifestyle. As electricity becomes a relevant and critical resource, we work tirelessly to ensure that customers do not have to choose between reliable, affordable, or cleaner power. Our customer-focused approach means matching resources with peaks in demand, providing customers with the power they need.

Reliability

We invest in maintenance to ensure that generating units are available when customers need power — especially on the hottest (and coldest) days of the year, when demand is at its highest. While renewable generation brings tremendous benefits in the form of increasingly competitive, clean energy, its intermittent nature presents challenges for grid integration. We are responding to this need, supporting the advancement of storage technology as well as flexible, fast-start generation that is able to activate on an as-needed basis, often in just minutes.

Stepping up for reliability NRG: Facilitator for energy market integration





https://investors.nrg.com/news-releases/news-release-details/nrg-return-texas-natural-gas-plant-service

RESIDENTIAL SOLUTIONS | BUSINESS SOLUTIONS | GENERATION AND SUPPLY | CUSTOMER FOCUS | RELIABILITY | RESILIENCE

Our generation fleet:

- Diverse fuel sources
- Geographic proximity to customers
- Integrated for resiliency and reliability

Resilience

Resilience includes the ability to generate power during and after extreme weather events. Our fleet utilizes a mix of fuels, which has proven to be highly beneficial in extreme weather events and has contributed to the resilience of the electric power system. When one

particular fuel supply becomes curtailed or constrained, the ability of a power plant to rely on multiple fuel sources enables grid operators to maintain reliable electricity.

Fuel diversity means that oil and coal, with on-site fuel storage, can take over for natural gas when gas supplies are interrupted (such

as during freeze events, as we saw with the polar vortex of 2014) and natural gas can take over for coal when coal delivery is impacted (such as during extreme rain events, like we saw during Hurricane Harvey). Likewise, when a natural disaster such as flooding impacts plants in one area, plants in different areas can take over and keep the power flowing.

Resilience also means making sure that we harden our physical assets to stay operational in the face of climate impacts.



Our safety commitment:

- Comprehensive
- Constantly measured
- Company-wide

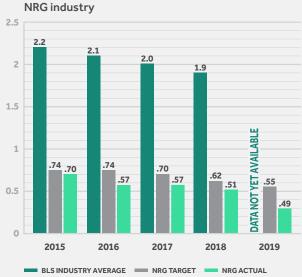
best ever TCIR safety record

Safety

The values that hold us together are building a stronger unified company. Our employees are the most valuable resource we have and are vital to our success. In 2019 we expanded on our promise of a sustainable workforce and workplace.

A key metric of our workplace is safety. We have a goal to be in the top decile of OSHA recordable injury rates — specifically, 0.55. We are proud to state that in 2019, we had our best safety performance year ever on record. We were well below the industry average for Total Case Incident Rate (TCIR) by registering a 0.49 measure, well within our top-decile goal.

Recordable incident rates



Keeping contractors safe

Our comprehensive safety program includes everyone who works within an NRG facility: employees, contractors, vendors, and visitors. We screen contractors and assign them on-site coordinators to monitor their safety performance. Additionally, we audit our contractors to ensure that they meet all safety expectations. In 2019 we implemented the use of an outside service company that specializes in the contractor safety review process, providing detailed reviews of all written safety programs to ensure regulatory compliance and performance criteria. This robust review process helps contractors reach the desired safety performance that we expect and gives them the necessary written programs to work safely.

Safety training

We are committed to providing valuable resources and training to help our workforce understand what it takes to stay safe. During 2019, we had 48,733 total hours of safety training completed, with a total of 4,923 employees and 1,028 contractors completing safety courses.

NRG fleet facilities with OSHA Voluntary Protection Program (VPP) Star status¹⁴

- Cedar Bayou
- Central Repair Shop
- Limestone

- San Jacinto
- Seward

- TH Wharton
- WA Parish
-



Plants with zero recordables in 2019¹⁴

- Antelope Elk
- Arthur Kill
- Astoria
- Carlsbad Energy Center
- Cedar Bayou
- Connecticut Jets
- Cottonwood
- Deer Park
- Devon
- El Segundo

- • Encina Cabrillo I & II
 - Greens Bayou
 - Huntley
 - Indian River
 - Ivanpah
 - Long Beach
 - Marsh Landing
 - Middletown
 - Midway Sunset
 - Mustang

- Oswego
- Panhandle Wind Ranch
- Saguaro
- Seward
- Sunrise
- TH Wharton
- Vienna
- Walnut Creek

55

Will County

14 NRG owned or operated facilities as of December 31, 2019. Only facilities owned by NRG are included in all other sustainability metrics

SAFETY | DIVERSITY AND INCLUSION | EMPLOYEE ENGAGEMENT | COMMUNITY | POSITIVENRG | JUST TRANSITION | ECONRG

Elevating diversity

In 2019, diversity and one of our company's five core values

Diversity and inclusion

Diversity and inclusion (D&I) is the cornerstone of an energizing workplace. We aspire to be a place of inclusion where every voice matters, celebrating our differences and championing our diversity. All employees should know they are valued and can contribute fully to our goal of creating a sustainable energy future. In 2019, Forbes recognized our company as one of the Best Employers for Diversity. As a signatory to the U.N.'s Women Empowerment Principles, we have an active, mid-level mentoring program that includes, but is not limited to, mentorship and development of high-

potential minorities and females in technical and non-technical roles in our Plant Operations and Business Solutions divisions. Our Retail division has leveraged business partnerships and provided employee education opportunities to align D&I goals with workplace culture, employee satisfaction, and business results. We continue to leverage our existing membership in the Gartner Diversity & Inclusion Leadership Council to gain access to information and research from Fortune 500 companies on best practices. We have developed new partnerships with the Texas and National Diversity Councils, and the National Utilities Diversity Council.

Diversity at NRG¹⁵ COMPANY WILD F BLACK OR AFRICAN AMERICAN (NOT HISPANIC OR LATINO) HISPANIC OR LATINO WHITE (NOT HISPANIC OR LATINO) ASIAN (NOT HISPANIC OR LATINO) NO FLECTION NATIVE HAWAIIAN OR OTHER PACIFIC TWO OR MORE AMERICAN INDIAN OR ALASKAN NATIVE (NOT HISPANIC OR LATINO)

We have remained steadfast in our commitment to D&I by making it one of our core company values, creating a D&I Steering Committee, having a dedicated internal website specific to all things D&I, and implementing a Business Resource Group program. We continue to foster our recruiting relationships with Recruit Military, iHispanic, NAACP, Out Professional Network, International Association of Women, Black Data Processing Associates, and the Professional Diversity Network to ensure a diverse slate of qualified candidates for our external hiring needs. Our progress will continue in 2020 by conducting a pay equity study to ensure that we are not making pay decisions on gender, race, or other irrelevant factors. We will conduct companywide unconscious bias training to help all employees recognize, understand, and reduce implicit bias.



57

Gender breakdown at NRG¹⁵

	<u>_F_</u>	<u>M</u>
overall NRG Gender	29%	<mark>71%</mark>
orporate	41%	59%
esidential and Business	52%	48%
eneration	7%	93%
liddle Management - Corporate		
liddle Management - Residential and Business		
liddle Management - Generation	9%	91%
P and above - Corporate		80%
P and above - Residential and Business		69%
P and above - Generation	17%	83%

15 Self-selected

Powering our people

76% said they personally connected with our purpose and Power Values

Employee engagement

Holistic sustainability at NRG means equipping our most valuable asset — our people — with the resources to bring sustainability to life at work, at home, and in their communities. The sustainable energy future we envision requires involvement from all of our employees. Providing a productive work environment helps us to align our actions with our core values, vision, and mission.

A personalized path to wellness

To keep our employees healthy, happy, and feeling their best, we provide an abundance of benefits and resources to support every aspect of well-being — physical, financial, and emotional. We offer full- and part-time employees scheduled to work 20 or more hours per week benefits that include generous health, dental, vision, and life insurance options, as well as additional

offerings to support their needs. In 2019, we transformed our program to allow for more personalized experiences and further improve engagement. This engagement is evident in our statistics for employees completing their annual physicals — an important step in every employee's wellbeing journey.

Annual physical

Employee completion

2017

2019 50%

Princeton Half Marathon

Our continued support as a sponsor of this running event expanded in 2019 as NRG employees from beyond our Princeton headquarters were encouraged to take part and reimbursed for their travel to New Jersey. In addition, all NRG runners had access to a full training plan, nutritional guidelines, and certified trainers in the months leading up to the race. Funds raised through the annual event support HiTOPS, a local organization providing sexual health education and support for adolescents.

26

NRG runners

different states



NRG riders

\$76,364

NRG donations

467.5

hours



Our employees once again took part in this annual fundraising event in support of the MS Society and the ongoing effort to find a cure for multiple sclerosis. Beyond the 49 employees who trained for and took on the challenge of a 150-mile, twoday bike ride from Houston to Austin, others contributed to the cause as well through volunteer support both before and during the two-day weekend event.





59



A community presence and commitment

Our community includes our employees and the places where they live and work. We have evolved our purpose and modernized our values to better reflect who we are today and to serve as a guidepost for bringing the power of energy home.

PositiveNRG 2019 impact:



11.273

volunteer hours



total donations



states we

volunteered in



employees participated



264

nonprofits served by volunteers



given to scholarships



PositiveNRG

Our corporate philanthropy program is called positive NRG. It enriches the communities we serve by supporting initiatives that address education, human welfare, the environment, and health and wellness. This includes our corporate giving efforts and special projects like our program specifically for power plant employees, econrg, and nonprofit partnerships through GME's Sun Club.

PositiveNRG Week 2019 by the numbers:



employees



states



nonprofits

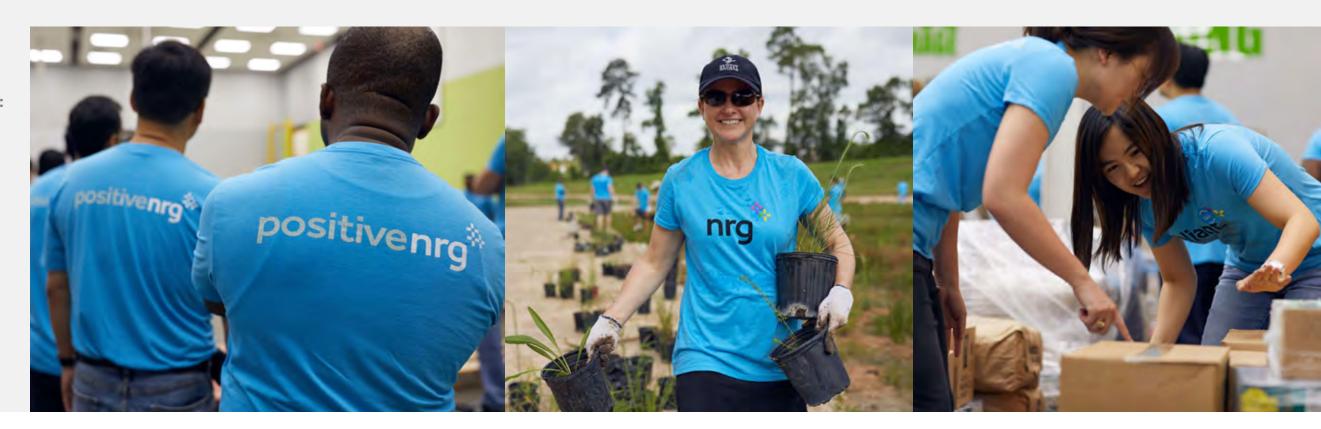


61

March of Dimes:

212 hours

\$28,060 NRG donations



More than a goal

Making sustainability part of our mission and outreach

Sun Club

In 2019. Sun Club continued its mission of helping create a cleaner planet by investing \$1.9 million in local communities — to fund sustainable solutions, conservation efforts, and educational programs. In total, those initiatives prevented more than 4.5 million pounds of CO2 from being released in the air. A total of 11 funded projects were completed in 2019, including the two featured here.

\$315,627

Ronald McDonald House — Philadelphia, PA

Serving as a sustainable model for 360 other Ronald McDonald homes, this facility uses renewable energy and features a solarpowered art piece that attracts native bees for its orchard of fruit trees.

\$200,000

My Possibilities — Plano, TX

This continuing education center for adults with disabilities is saving \$25,000 annually in electricity costs, thanks to a solar array. The donation also funded a new horticulture elective for students.

Business Solutions

For each business customer enrolling in our online account management (OAM) portal, a donation was made on their behalf.

\$4,000

Donated to charities (per OAM enrollment)

XOOM Energy

One of our newest retail electricity brands includes charitable community outreach as part of its business model. In 2019, this commitment supported two local charities with funding sourced through a 5% customer enrollment donation plan:

\$176,000

PetSmart Charities

To a local rescue organization

\$174,000

Driscoll Hospital

To the "Miracle Power" program in Central Texas

Just Transition

As part of our commitment to the Paris Agreement, we acknowledge the imperative of providing decent work and quality jobs as it relates to the power sector and the effect that the decarbonization imperative has on traditional generation. In the event of a large downsizing at a plant (or plant closure), our Plant Operations leadership team works with Human Resources to take a proactive approach to ensure that employees have the most options available to them during this transition. This includes meeting with

union leadership, if applicable, on the effects of the transition, meeting with all impacted employees to assess if they are interested in another role at NRG, ensuring that impacted employees are aware of openings, giving preference to displaced qualified internal employees for open roles at other plants, and when the employee is willing, offering to relocate impacted employees to take those roles. In addition, NRG offers outplacement services, resume writing skills workshops, and tuition assistance for retraining.



65

econrg

econrg promotes ecological stewardship among our plant employees with initiatives aimed at improving environmental awareness and education. In 2019, NRG plant employees participated in 50 voluntary econrg projects and NRG facilities donated more than \$43,000 to benefit the environment and provided \$26,000 in scholarships to students expressing interest in environmental

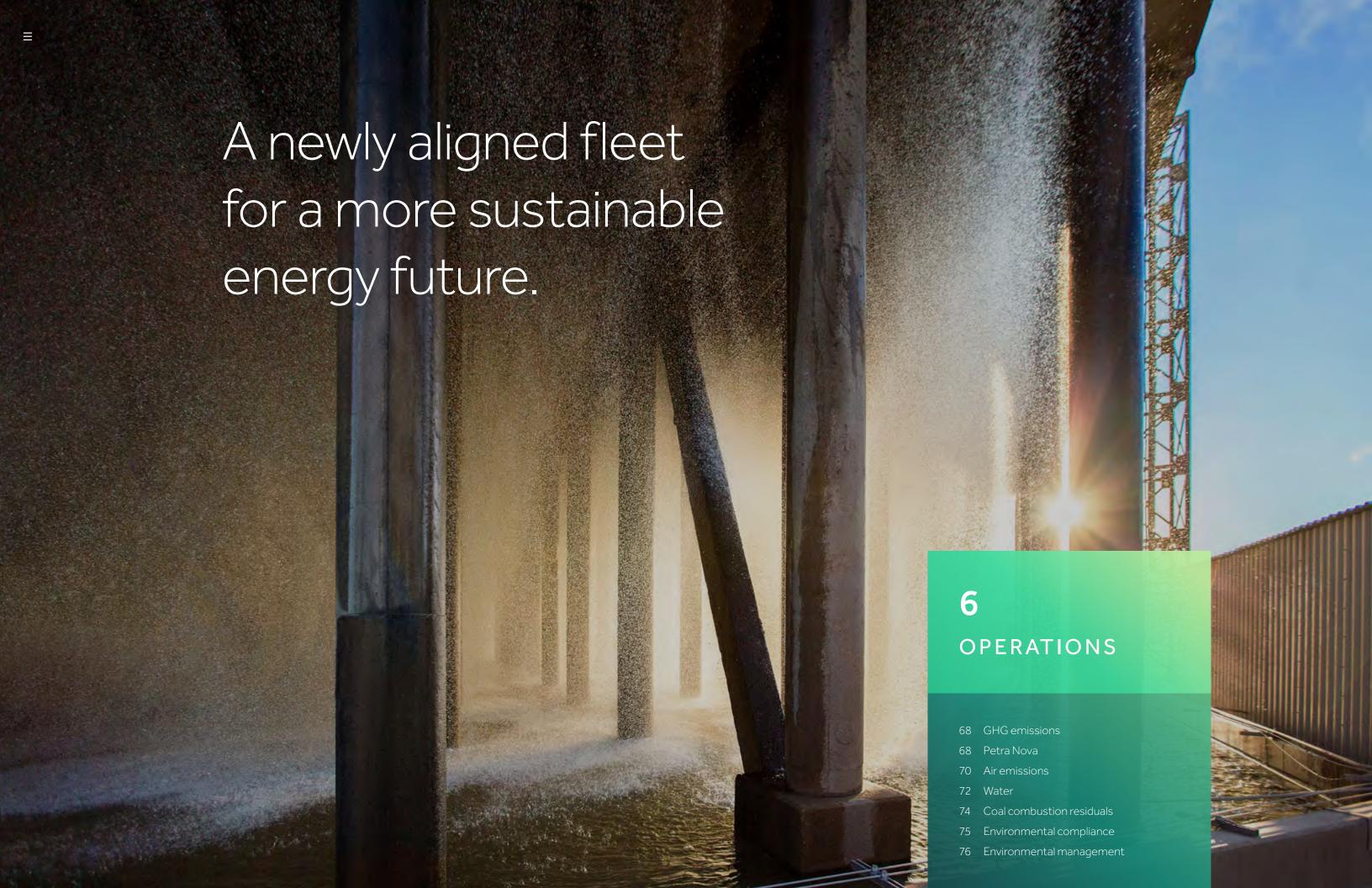
- Biodiversity: wildlife habitat enhancements, invasive species removal, stocking native fish in local waterways, supporting bird, butterfly, and bee survey activities, etc.
- Community: tree planting, educational outreach to local schools and communities, beach and public area cleanups, and public space invasive species removal
- energy efficiency improvements, solar-powered lighting, LED lighting,

econrg award

The El Segundo Generating Station was the recipient of the 2019 econrg Green Glass Award for its exemplary commitment to sustainability. The El Segundo employees volunteered to support projects including:

- "Beauty and the Beach" cleanup project, during which over 2,000 pounds of trash were removed from a two-mile stretch of coastline on Dockweiler Beach
- Malibu Foundation for Environmental Education's "Kids Ocean Day," which focuses on children's awareness of the impact our actions have on the ocean
- Hosting engineering students from





GHG emissions

In 2019, we accelerated our GHG emissions reduction goals. Our new target is 50% reduction by 2025 and net-zero by 2050 (from a 2014 baseline). We are pleased to report that we are 83% of the way to our midterm goal. Emissions have decreased 41% since 2014.

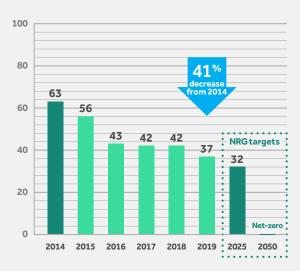
Carbon pricing

NRG advocates a price on carbon emissions that applies nationwide and to all sectors of the economy. Like many others, we believe that the most economically efficient policy to limit carbon emissions is to target them directly with a price that all actors in the wider economy can trade, invest, and plan around. Such a policy should replace redundant laws and regulations that take aim, less efficiently, at the same goal of reducing carbon dioxide. However, there have been dozens if not hundreds of state and local enactments that take aim at climate change.

83% of the way to our

Tracking toward our GHG reduction goals

(NRG U.S. CO_2e emissions scopes 1, 2, & 3*) mTCO₂e



As of December 31, 2019. Emissions inventories have been adjusted for historical sales.

To ensure consistency and relevance, NRG's base year emissions have been recalculated according to GHG Protocol: A Corporate Accounting and Reporting Standard, Revised Edition following generation asset portfolio changes. This revised base year has been verified by a third-party.

4

million tons of CO₂ captured since Petra Nova began operations

Petra Nova

The world's largest post-combustion carbon capture facility is located at our WA Parish Generating Station southwest of Houston.

Since late 2016, the Petra Nova project has combined carbon capture with enhanced oil

field recovery (EOR) to increase domestic oil supply while decreasing the amount of CO_2 released into the atmosphere. In 2019, the system sequestered more than 1.5 million tons of CO_2 .

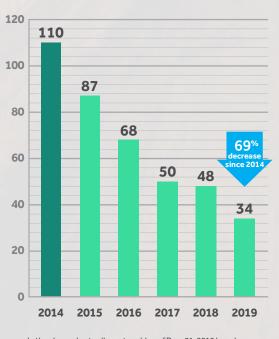




Air emissions

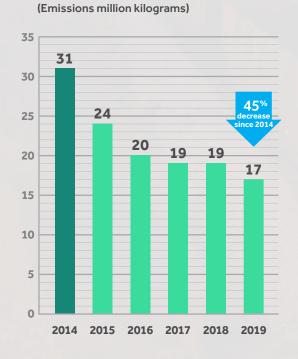
The charts include emissions from NRG-owned generation. Our SOx and NOx emissions declined 32% and 55%, respectively. Factors leading to the decreases include reductions in fleetwide annual net generation and improved environmental controls. In 2019, our mercury emissions decreased approximately 28% from 2018. The reduction was driven by the slight decrease in coal-fired generation.

NRG Annual U.S. SO_x emissions (Emissions million kilograms)

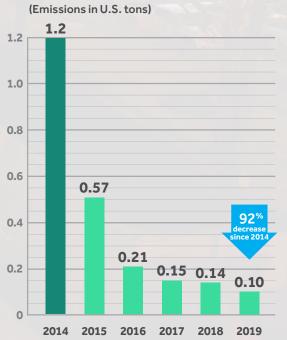


In the above charts all assets sold as of Dec. 31, 2019 have been removed from inventories.

NRG Annual U.S. NO_x emissions



NRG Annual U.S. mercury emissions



Water

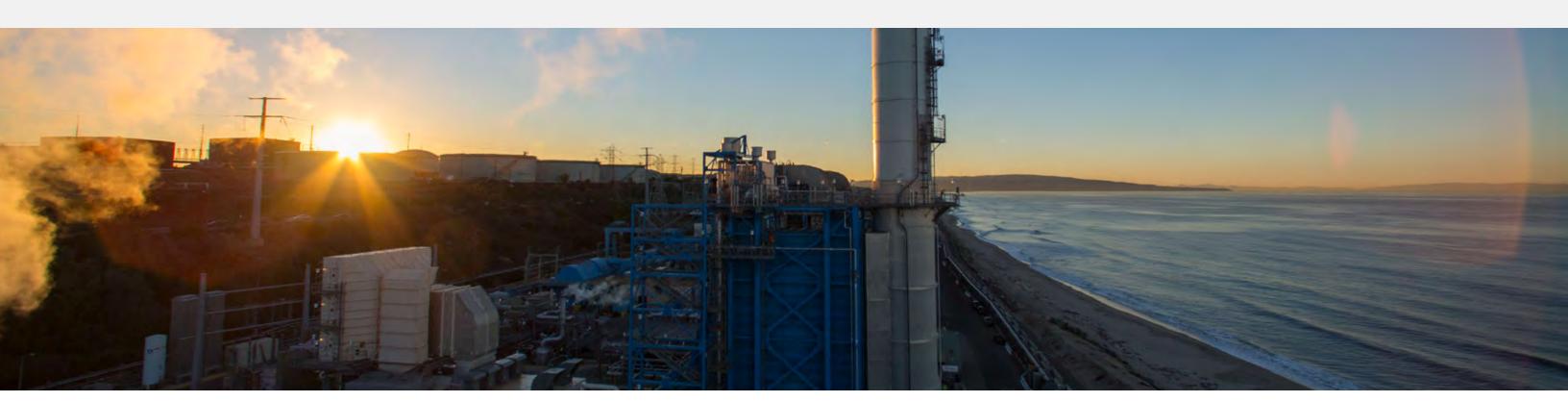
Operating some of our power generation facilities depends on sufficient amounts of available fresh water as well as recycled, brackish, and ocean water. The primary direct use of this water is cooling of condensers during power generation. We have designed our approach to water management with the understanding that the water issues (usage, scarcity, quality, and biodiversity) are site-specific. We have invested in water-saving technologies at our generating stations where cost-effective. We also reduce the water required to produce electricity by using nonpotable water, such as brackish ocean water or grey water from sewage treatment plants, and by reusing water in plant cooling and boiler systems.

Water effluents and waste

Reducing effluents and waste is important as stewards of the environment. For example, in completing the annual CDP Water Security questionnaire, we use tools such as state water quality studies and designations, and the World Resource Institute's Aqueduct tool, to evaluate water sustainability impacts. In 2019, we continued to enhance the current waste diversion program by evaluating waste generated and identifying recycling opportunities. We worked with business partners to implement waste reduction and recycling plans.

NRG water withdrawal and discharge¹⁶





¹⁶ Sold assets as of Dec. 31, 2019 have been removed from historical inventories

Coal combustion residuals

In 2019, our facilities generated 1.1 million metric tons of coal combustion residuals (CCR), more than 75,000 metric tons (66%) of which were recycled. Coal combustion residuals are used in industrial applications such as on-and-off plant road construction, as well as in materials such as cement and wallboard. This practice reduced the need for mining of virgin resources such as gravel and gypsum. In April 2015, the EPA promulgated a rule which regulates the disposal of CCRs. We maintain a CCR Rule Compliance Data and Information page on nrg.com as required.

Coal combustion residual recycling rate (%)¹⁷



Environmental compliance policy statement

We're committed to creating value for our owners by managing our business in economically and environmentally responsible ways that focus on continual improvement. To succeed, we must:

- Meet or exceed applicable environmental laws and instill environmental responsibility in our employees
- Reduce our environmental impacts
 (including climate) by integrating
 environmental considerations into
 business operations and strategy,
 operating more efficiently, and using
 cleaner, cost-effective technologies

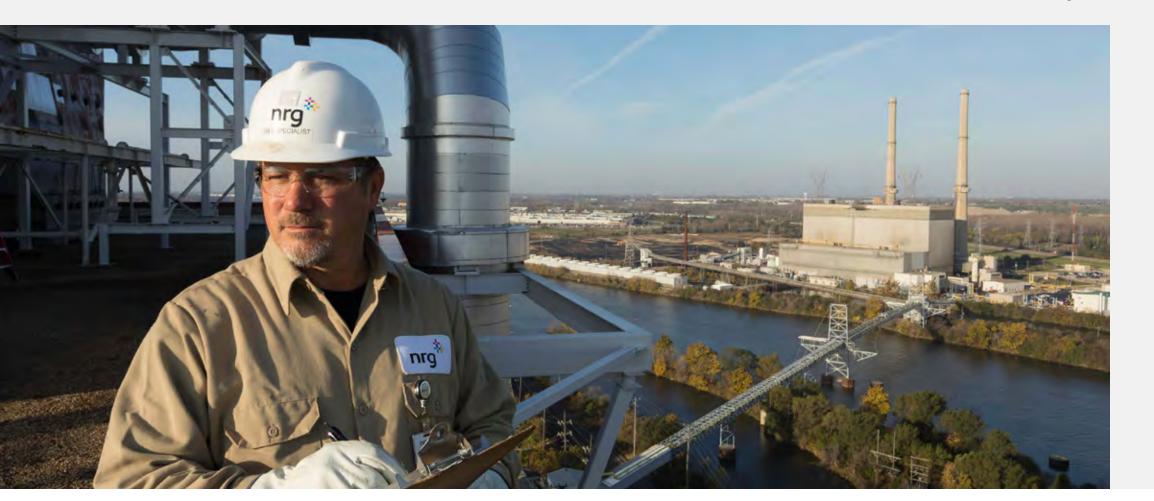
- Promote stewardship and conserve biodiversity at our facilities and in our communities
- Seek constructive engagement in the legislative and regulatory process, as well as with environmental stakeholders, through honest, respectful, and responsible dialogue
- Measure the effectiveness of our environmental program by tracking environmental performance and communicating our performance internally and externally

Notices of violation

A notice of violation (NOV) is a formal written notification from an environmental regulatory agency that a noncompliance event by a company has been identified. It can be issued for any violation of law, regulation, permit, certification, or license, regardless of significance. A NOV may or may not result in a fine; historically, the vast majority of NOVs issued to NRG have not included a fine.

A summary of our NOVs and spills:

- Four NOVs received during 2019, three of which date back to 2018 or earlier; none of them included any penalties
- Six reportable oil spills releasing approximately 13 barrels of oil
- Three reportable spills releasing approximately
 93 barrels of bleach and antifreeze into
 containment and on-site ground cover
- Zero unauthorized discharges of water



¹⁷ Baselines have been recalculated to reflect the composition of the NRG generation fleet. In some cases, that has resulted in differences from beneficial use percentages previously reported.

Metric tons of coal

recycled

combustion residuals

Environment management

We are committed to operating in an environmentally responsible manner and in compliance with all applicable environmental requirements. Our company's Environment Over Production policy sets a clear understanding that environmental compliance takes precedence over production. Every employee is empowered to take necessary steps to always maintain environmental compliance.

We assess our operations each month through our environmental key performance indicator (EKPI), which measures a number of leading and lagging parameters such as notices of violation (NOVs), reportable spills, and compliance with laws. Our goal for the year was to have all our plants meet their plant-specific targets — in 2019, 100% of our plants met their targets.

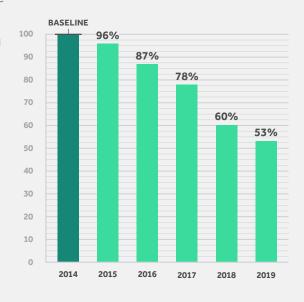
Fleetwide EKPI performance and site-specific EKPI performance (as applicable) are tied to the compensation of all employees, fostering collective accountability and environmental commitment within the workforce. Before a plant can receive credit for its performance, it must pass through an environmental "gate," which requires completion of one or more proactive initiatives to minimize the environmental footprint of the site.

To continuously improve environmental performance, we use an environmental management system called Intelex. It provides the tools and transparency to efficiently track our generation fleet's

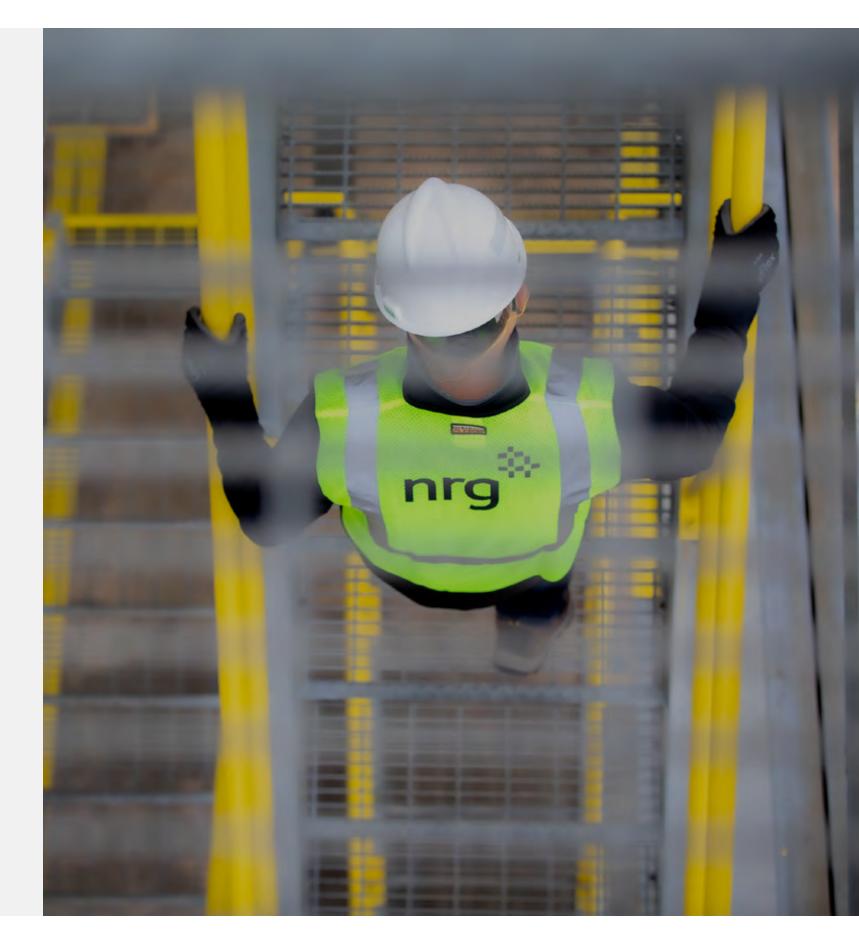
environmental performance. We use Intelex Incident Management, Corrective Actions, and root cause applications to report incidents, analyze root causes, and ensure completion of corrective actions.

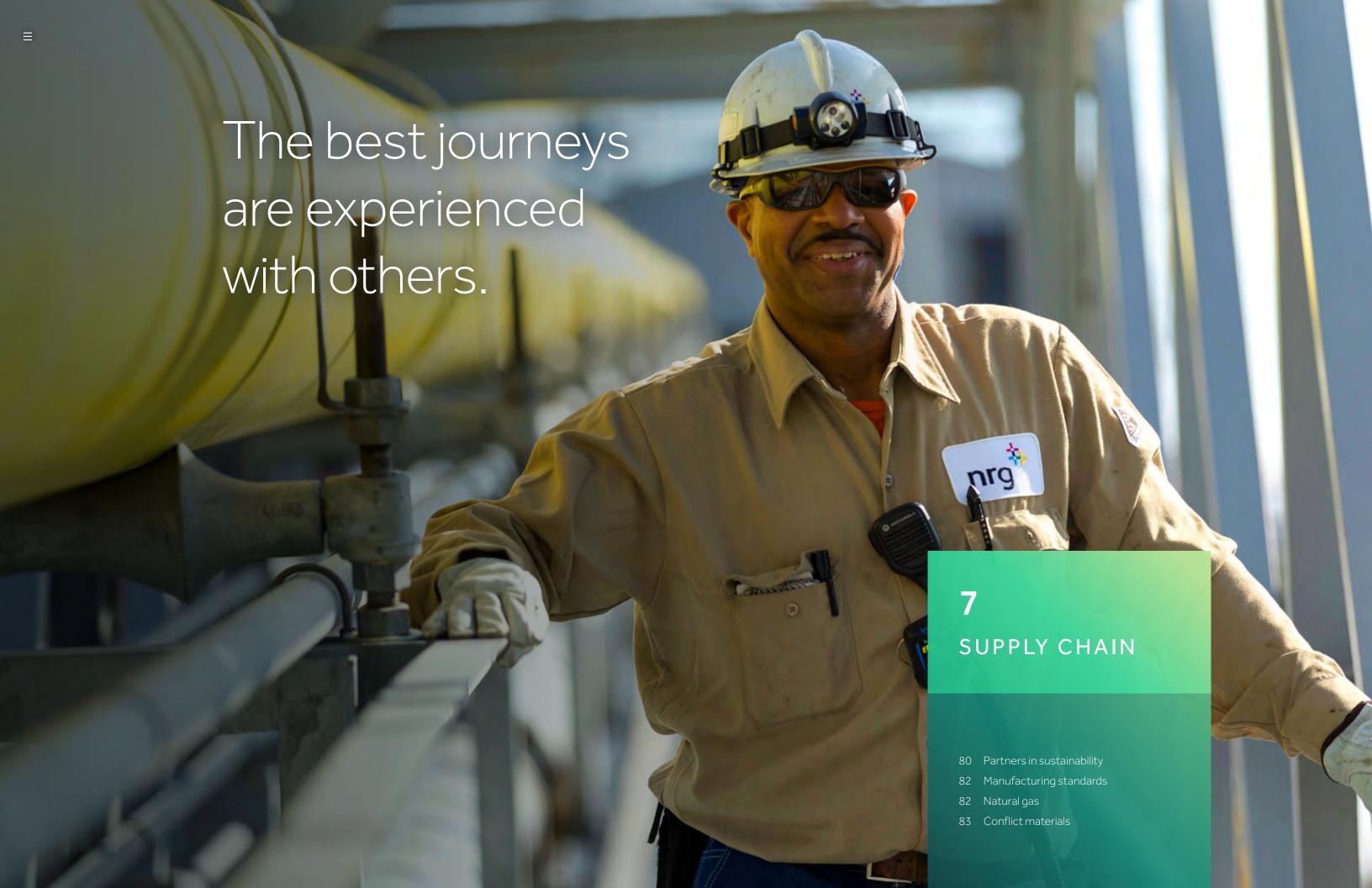
The NRG Environmental Policy & Procedures manual directs personnel at all our facilities to maintain environmental compliance in all activities and processes. In 2019, environmental audits were conducted at several facilities. This program required prompt completion of both corrective and preventive actions for all findings and observations. The figure below illustrates a significant overall improvement in environmental compliance since 2014:

Environmental performance (the lower percentage the better)



 $Historical \, values \, have \, been \, adjusted \, for \, U.S. \, asset \, sales.$





Partners in sustainability

We are on a path toward sustainability, one that includes tangible and publicly stated goals that we have set for ourselves. But we are not traveling down this path alone. Our supplier partners are on this mission with us, helping us and our communities to become better stewards of the environment.

We are committed to working with suppliers that bring innovation and sustainable solutions to our organization. We strive to maintain a position of leadership in supplier diversity among power generation companies. Our core values provide the basis for our business decisions and drive our commitment to diversity within our supply chain. We are committed to:

- Maximizing opportunities for diverse businesses wherever we operate in the U.S.
- Fostering a culture that promotes the economic and sustainable development of diverse business enterprises in the communities where we operate
- Building partnerships with suppliers to deliver value creation and exceptional service to our customers

To learn more and read our CEO Commitment Letter on Supplier Diversity, visit the <u>suppliers</u> overview on our website.

In 2019, we continued creating value through transparency and disclosure by participating in the world-leading CDP Supply Chain engagement program. Once a year, we ask our top suppliers to disclose information about their climate change performance. NRG received an A-, leadership level, for our supplier engagement in 2019.

2019 CDP supplier response highlights¹⁸

40%

2019 response rate, improved from 39% in 2018

71%

NRG suppliers engaging their own suppliers

53%

NRG suppliers who have an active target to reduce their emissions (Scope 1&2 absolute)

17%

NRG suppliers who have a specific renewable energy target (10% committed to RE100)



18 Data sourced from CDF

Suppliers: Partners in progress

- Social Responsibility Standards
- Third-party audits
- Wide-ranging policies and objectives

Manufacturing standards

We require all contract manufacturers (including subcontractors) to adhere to our Social Responsibility Standards for Manufacturers, which, at minimum, requires compliance with applicable laws and regulations, industry best practices, and the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work. Third-party audits are conducted each year and we report the results of such third-party manufacturing audits to the Board's Audit Committee. Manufacturers who employ subcontractors shall verify that these standards are upheld by their subcontractors. These standards are referenced and made part of any manufacturing agreement put forth by our company. To manage compliance with these standards, manufacturers are encouraged to establish policies and

performance objectives related to labor, grievances, health and safety, environmental responsibility and ethics, and business integrity. Read the full policy <u>here.</u>

Natural gas

As coal continues to be a smaller share of the power generation fuel source, natural gas is continuing to be necessary on the path to decarbonization. Coupled with historically low prices and high supply, natural gas power amounted to 38% of all U.S. utility-scale electricity generation in 2019.¹⁹ This is important as a piece to consider along the journey toward a sustainable energy future. While natural gas produces almost 50% less CO₂ than coal, the methane emissions associated with natural gas are 86 times more harmful as a greenhouse gas than CO₂.

An analysis of carbon and water in our supply chain revealed that most of our environmental impacts occur with the fuel suppliers. That enables us to craft strategies that address our most significant areas of impact and the vendors that comprise the largest portion of our supply chain footprint. As a result, in 2017, we became a founding member of the Natural Gas Supply Collaborative (NGSC)²⁰, a voluntary collaborative of natural gas purchasers promoting increased transparency through voluntary reporting by natural gas producers.

NGSC members include some of the largest natural gas purchasers in North America. Collectively, NGSC participants purchase gas equivalent to more than 14% of U.S. marketed natural gas and, as part of a portfolio of resources, generated enough electricity from natural gas to power almost 41 million households.

Operating at the intersection of the natural gas supply chain and end-use customers, NGSC participants are increasingly being asked to address questions concerning natural gas production. In 2019, we continued our work with the NGSC and hosted one of the annual meetings at our Houston headquarters. In September 2019, we were also part of a joint statement of the EPA's proposed policy amendments to the new source performance standards for the oil and gas industry. These proposed amendments removed regulations of methane emissions²¹ which are key to mitigating the worst effects of climate change and to protecting public health. The statement is publicly available <u>here</u>.

Conflict minerals

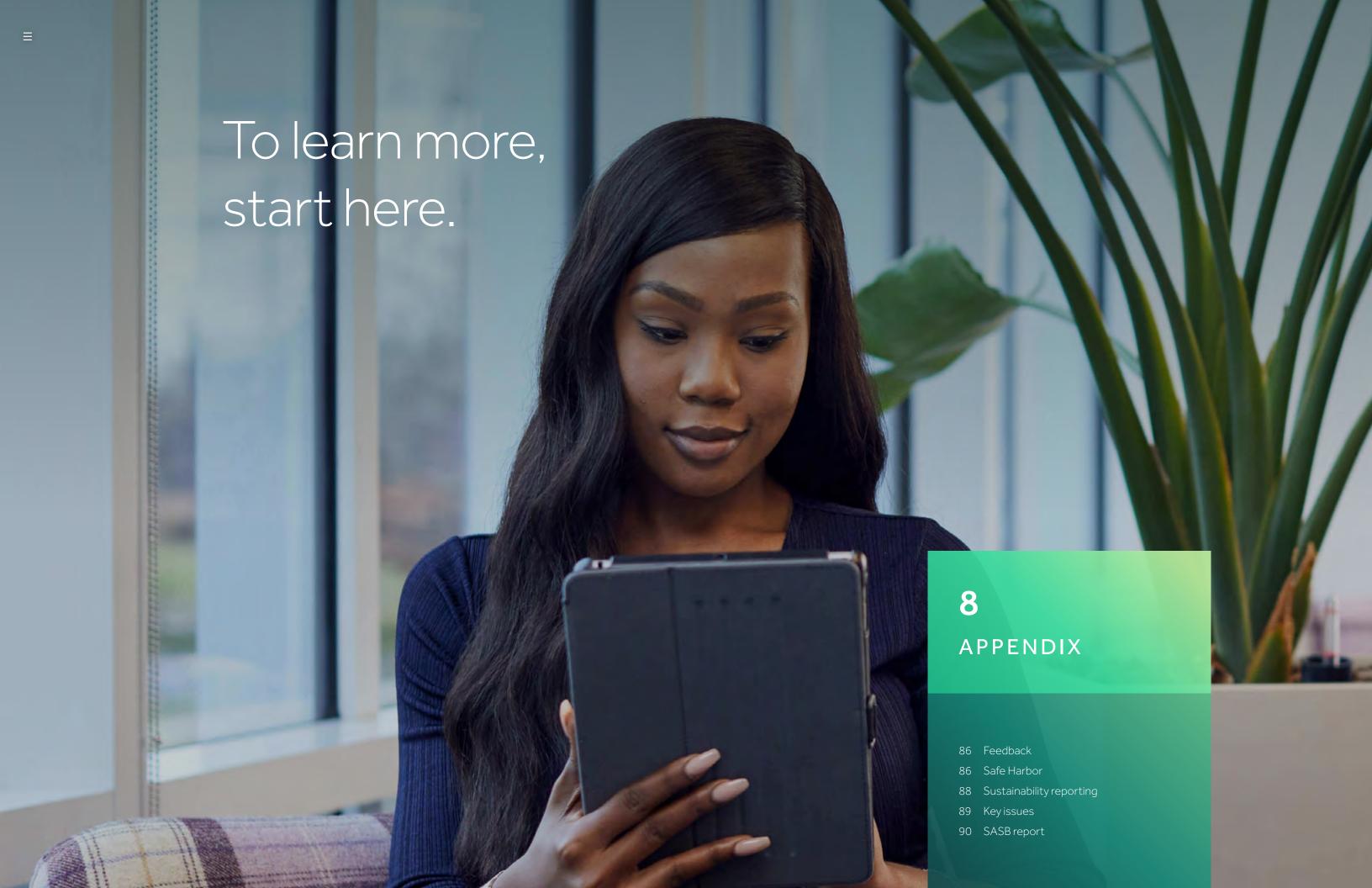
In September 2014, we acquired Goal Zero, a provider of portable solar power and battery pack products and accessories. In our first conflict minerals filing in 2016, Goal Zero analyzed the materials used in the production of its products and determined that substantially all of its products may contain conflict minerals. (Conflict minerals are tin, tantalum, tungsten, and gold, referred to as 3TGs.) The Manufacturing Standards previously mentioned apply to Goal Zero suppliers and they are required to comply. The standards also set requirements based on industry best practices and international conventions including those related to 3TGs.



https://www.eia.gov/energyexplained/electricity/electricity-in-the-us-generation-capacity-and-sales.php

 $^{^{20}\} https://www.scientificamerican.com/article/how-bad-of-a-greenhouse-gas-is-methane/$

²¹ https://www.mjbradley.com/content/natural-gas-supply-collaborative-0



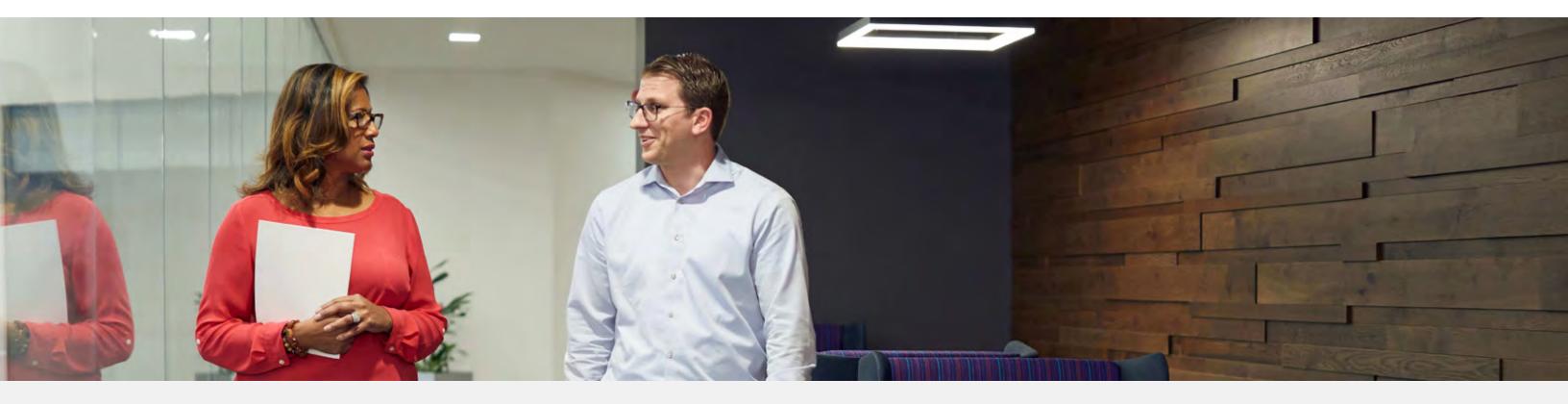
Feedback

If you have any comments or questions about this report, or would like more information on our sustainability efforts, please visit nrg.com or email sustainability@nrg.com

Safe Harbor

This 2019 Sustainability Report contains forward-looking statements that may state NRG's or its management's intentions, beliefs, expectations or predictions for the future. Such forward-looking statements are subject to certain risks, uncertainties and assumptions, and typically can be identified by the use of words such as "will," "expect," "estimate," "anticipate," "forecast," "plan," "believe" and similar terms. Although NRG believes that its expectations are reasonable, it can give no assurance that these expectations will prove to have been correct, and actual results may vary materially. Factors that could cause actual results to differ from those implied by the forward-looking statements in this communication are set forth in the Company's most recent Annual Report on Form 10-K, quarterly and other periodic reports, current reports and other filings with the Securities and Exchange Commission at www.sec.gov. NRG undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.







This sustainability report is based on our corporate performance for all operations in calendar year 2019 and, where stated, NRG refers to NRG Energy, Inc. as well as its affiliates. This is our 10th annual sustainability report and it was developed with guidance from the Global Reporting Initiative (GRI) Standards at the Core level, as well as the GRI Electric Utilities Sector Supplement. In 2019, we joined the GRI GOLD Community, which supports our commitment to embed sustainability into our strategic decision-making. The report includes topics from the GRI framework for our sectors that are priority issues to the company. See the <u>GRI Standards</u> table for a full list. Our sector is defined as electric utility or power producer.

Achievement will be measured according to stakeholder feedback, including through investor relations and participation in

engagement and disclosure organizations such as Ceres, CDP, and SASB. The scope of this report is primarily contained within the calendar year 2019, but some long-term projects and goals are discussed. The NRG website also provides visitors the latest news and events around the company's environmental, social, and governance initiatives.

We are committed to leading our sector in sustainability transparency and disclosure. Our sector is defined as electric utility or power producer. Achievement will be measured according to stakeholder feedback, including through investor relations and participation in engagement and disclosure organizations such as GRI, Ceres, and SASB. 2019 marked the fourth year we disclosed sustainability data using the SASB standards.

Key issues

We strive to report decision-useful information to our stakeholders in an efficient and concise manner. We recognize that we have many different stakeholder groups which may require information presented in a variety of ways and on numerous topics. We work diligently with our key stakeholders to seek out the type of information they are looking for and evaluate the processes to deliver this data to them. However, given the rapidly growing landscape of voluntary reporting this past decade, we must also determine what is the most relevant material to collect on our operations while achieving greater transparency year over year. Part of this process is conducting a key issues assessment periodically to ensure that the topics we focus on help us identify

potential strategic and operational risks and opportunities. This assessment provides a foundation of topics from which to prioritize our sustainability goals and initiatives, build our annual sustainability report, and provide insight into emerging issues that our stakeholders care about. For the purposes of sustainability reporting, we follow the GRI framework to report on issues of importance to the company and its stakeholders. Relevant financial implications, as well as a discussion of risk and opportunities associated with some of these issues, can be found in Part 1, Item 1A in our 2019 Form 10-K. Additional financial statements or equivalent documents can be found here.



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SASB standards table

The Sustainability Accounting Standards Board's (SASB) mission is to develop sustainability metrics for public corporations to disclose material, decision-useful information to investors. We support work that contributes directly to generating comparable and consistent data. The nature of our business directs us to consult the Infrastructure Sector – Electric Utilities. Below is a table which contains those topics we have identified as key issues and against which we are able to report on as a publically traded company. Activity metrics that may assist in the accurate evaluation and comparability of disclosure may be found in NRG's 2019 Form 10-K and in NRG's 2019 Sustainability Report. Quantitative data may be followed by narrative information that contextualizes the data table and is also responsive to any qualitative metrics. For more details on our report process please visit our approach to sustainability reporting on page 88.

Sustainability Disclosure Topics and Accounting Metrics

SASB code	Accounting metric	2019					
Greenhouse gas emissions and energy resource planning							
	(1) Gross global scope 1 emissions (million metric tons)	39,000,000* *Rounded to nearest million. Includes 80% ownership of a 605MW capacity coal plant in Australia. Generation includes equity owned plants as of Dec. 31, 2019.					
	(2) Percentage covered under emissions-limiting regulations, and	8%					
	(3) Percentage covered under emissions-reporting regulations	99.99%					
IF0101-01	Clarification of percentage covered under emissions-limiting and emissions-reporting regulations: A significant majority (>99%) of NRG's emission sources are subject to mandatory federal (USEPA) greenhouse gas reporting regulations. In addition, some of these emission sources (18% specified under IF0101-01(2) above) also report to regional and state CO ₂ e reporting programs that are disclosed annually as part of NRG's financial reporting data (RGGI, AB32).						
	Discussion of accounting, estimations and uncertainty for scope 1 emissions: Scope 1 includes only direct GHG emissions associated with fuel combustion in boilers, turbines and engines used for the production of wholesale electric power. The Scope 1 GHG emissions were determined by using methods specified within Title 40, Chapter I, Subchapter C, Part 98, Subparts A, C, and D of the Code of Federal Regulations. The determination of the equity share of GHG emissions is consistent with equity share methodologies for equity share accounting for greenhouse gas emissions as described in GHG Protocol: A Corporate Accounting and Reporting Standard, Revised Edition. GHG emissions from combustion of fossil fuels used for other activities or equipment, such as auxiliary boilers, starter engines, mobile sources, and offices is not included and was estimated to represent under 0.25% of the reported Scope 1 emissions. The Scope 1 emissions do not include emissions from fugitive sources such as hydro fluorocarbon releases from use of refrigeration and/or air conditioning equipment, sulfur hexafluoride (SF6) from electrical equipment, and methane releases from natural gas transport.						
IF0101-02	Description of long-term and short-term strategy or plan to manage scope 1 emissions, emission-reduction targets, and an analysis of performance v. those targets	NRG's goal is to reduce its total U.S. Scope 1, 2, and 3 (business travel) CO2e emissions 50% by 2025, and achieve net-zero by 2050, using 2014 as a baseline. From 2017 to 2018, NRG's CO2e emissions decreased from 47 million metric tons to approximately 46 million metric tor representing a 2% reduction year over year and 73% of the way to our 2030 goal. This puts us on track to meet our science-based targets ahead of schedule. Disclosure of our strategy to manage scope 1 emissions is reported through CDP Climate Change questionnaire annually.					

SASB code	Accounting metric	2019						
		Air quality						
	Air emissions source	Air emissions (metric tons)		Percentage from production facilities within urbanized areas				
	NOx	16,510	27%	27%				
	SOx	34,280	76%	76%				
	PM10*	2,894	51%	51%				
F0101-04	Pb**	.21	25%	25%				
	Hg***	.10	17%					
	earliest reporting deadline for a rep report PM-10 emissions at the time ** In the case of lead emissions, vo ***In the case of mercury emission	e of submittal to SASB, NRG has use lumes are estimated for some facili ns, volumes are estimated for some	ed USEPA's AP-4 ties due to incom facilities due to i	2 emission factors to enplete data at time of p	estimate emissionsublication.			
		Water managem	ent					
	(1) Total water withdrawn (thousands of cubic meters)	3,863,115						
		2018 NRG water withdraw by source						
		Water source Total (thousands of cubic me		ic meters)	Percent			
		Fresh water		1,715,000		43%		
		Non-fresh water		1,673,000	1,673,000			
		Ocean		568,000		15%		
		Total	3,956,000			100%		
IF0101-05	(2) Total water consumed (thousands of cubic meters)	183,816						
	Percentage of each in regions with high or extremely high baseline water stress	Baseline water stress high (40-80%) extremely high (>80%)			with high o	Consumption from areas with high or extremely hig baseline water stress		
		Percent of total water				35%		
		Percent that is non-fresh*				<1%		
		*Non-Fresh water has a total dissolved solids great than 1,000 mg/l and is not used for agriculture or municipal water supply. NRG uses the WRI Aqueduct and the WWF Water Risk Tool to model and help assess water basin risk combination with regional internal expertise.						
		Type of generating facility in b	Type of generating facility in baseline water stress area			Number		
		Fossil fuel (natural gas, coal, oil)						
		Fossil fuel (natural gas, coal, oil)				12		

Nuclear

Total

Thermal (district heating and cooling)



SASB code	Accounting metric			2019)		
		Water manageme	nt (continued)				
IF0101-06	Number of incidents of non- compliance with water-quality and/or quantity permits, standards and regulations	0					
IF0101-07	Discussion of water management risk NRG's definition of substantive risk from business goals. Risk identification and a metrics, and indicators for water risk ass • Financial impact • Corporate earnings • Capital expenditure on technologies • Plant operation • Operation disruption due to shortage • Increase in water cost • Supply chain risk • Environmental impact • Availability • Quality of river basins • Regulations that impact supply and/or	n water is the possibility t ssessment process appli sessment leveraging the to reduce water consum	es to both direct of management and	operations ar d professiona	nd supply chain. NR	G uses the m	neasures,
	Discussion of strategies and practices to mitigate risks: Water risk is monitored by the risk owners (individual plant operators) and reported to management upon material changes with a threshold of 20% in water consumption and withdrawal levels. If determined that a water supply risk exists that could impact projected generation level at any plant within a two-year time frame, risk mitigation efforts are identified and economically evaluated for implementation. NRG Plant Op reviews modeling scenarios generated. Plant water usage is reviewed annually. Analysis is reviewed by the senior leaders of NRG Operations, Engineering, and Commercial Operations. WRI Aqueduct tool is used annually to develop a high-level view of basin level risk that informs strategic decision-making and the setting of goals and targets. This tool was chosen because of its open source nature and ease of use. Each generating facility is unique. The water risk approach identifies and addresses risks for each covering: •Availability •Quality •Regulatory •Stakeholders •Supply chain impacts •Financial •Operational •Environmental. Risk response decisions are primarily made and executed by managing plant operations to maintain compliance with all regulations. NRG identifies, assesses, and responds to supply chain water risk through CDP Water.						
		Coal ash mar	agement				
IF0101-08	Amount of coal combustion residuals generated (metric tons)	1,032,000					
	Percentage recycled (metric tons)	66% (679,000)					
	Total number of coal combustion residuals impoundments	12 surface impoundments as defined by 40 CFR 257.2.					
	Number by EPA hazard potential classification, broken down by EPA structural integrity assessment	NRG impoundment structural integrity rating and hazard potential classification					
IF0101-09			Less than low	Low	Significant	High	Incised**
		Satisfactory	0	2	5	0	0
		Fair	0	0	0	0	0
		Poor	0	0	0	0	0
		Unsatisfactory	0	0	0	0	0
		Not applicable	0	1	2	0	2
		*The safety factor ass lack of necessary infor impoundment will be of **To align with EPA re account for all impour	mation because closed in accordar porting we have a	of the constr nce 40 CFR 2 added a colun	uction age of the ir 57.101 and 257.10 nn for 'Incised' and	npoundment 2.	t. The inactive

SASB code	Accounting metric	2019					
		Workforce health and sa	fety				
	(1) Total recordable injury rate	0.49					
	(2) Fatality rate	0					
	(3) Near miss frequency rate	39.09					
IF0101-12		Process for classifying, recording and reporting: # of near misses reported / total hours worked X 1,000,000 = near miss frequency rate The National Safety Agency defined near misses as "an unplanned event that did not result in i illness, or damage, but had the potential to do so" NRG utilizes an electronic Incident Manage System to document, communicate, track, and trend specific factors about each event includic causal factors and corrective actions; this system provides automated fleet-wide notifications number of near misses was derived from a report pulled from the incident management syste NRG's OHS management system applies to 100% of U.S. operations. The system also include notifications to executive management when significant safety events occur that meet the decriteria for a Significant Event notification. The system also generates weekly reports to commprevious weeks' event to NRG personnel.					
		Nuclear safety and emergency m	nanagement				
	Total number of nuclear power	NRG South Texas LP is a 44% ow	ner of a joint undivided interest in S	TP.			
	units, broken down by nuclear regulatory commission action matrix column	Reactor unit	Action matrix column	Current regulatory oversight			
		South Texas 1	Licensee Response	Baseline inspection			
IF0101-15		South Texas 2 Table source: https://www.nrc.go	Licensee Response	Baseline inspection ctionmatrix-summary.html#r 4			
IF0101-16	Discussion of efforts to manage nuclear safety and emergency preparedness	as of March 2020 As a holder of an ownership interest in STP, NRG South Texas LP is an NRC licensee and is subject to NRC regulation. The NRC license gives NRG the right only to possess an interest in STP but not to operate it. As a possession-only licensee, i.e., non-operating co-owner, the NRC's regulation of NRG South Texas LP is primarily focused on NRG's ability to meet its financial and decommissioning funding assurance obligations. In connection with the NRC license, NRG and its subsidiaries have a support agreement to provide up to \$120 million to support operations at STP.					
	Ma	anagement of the legal & regulato	ry environment				
IF0101-21	Discussion of positions on the regulatory and political environment related to environmental and social factors and description of efforts to manage risks and opportunities presented	A discussion of risks can be found in the 2019 10-K SEC filing, Item 1-A, Risk Factors Related to N Energy, Inc., pages 23-36. Throughout 2019, we continued to engage with policymakers in Washington, D.C. and at the state level. We also maintained our relationships with groups such as the Electric Power Supply Associa and various informal organizations. When possible, we collaborate with major environmental group on clean energy access and climate solutions. Typically, we engage on legislative and regulatory actions designed to mitigate GHG emissions, as well as policies that foment the development and deployment of competitive low-carbon power generation technologies. We are most active in the debate aimed at protecting and expanding competitive power markets and consumer choice, but whom we believe are critical enablers of achieving least-cost, low-carbon outcomes.					
		Regulatory filings, white papers, presentations, and other materials that NRG has prepared and submitted setting forth NRG's positions on a variety of critical subjects driving our business and t industry can found at http://www.nrg.com/company/energy-policy/ .					

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