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**SUSTAINABILITY REPORT | 2017**



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**Businesses create the most value when they fulfill a societal need in a meaningful way.**

I often find myself reflecting on this sentiment and the importance of electricity in our modern life. Electricity, the lifeblood of modern society, powers individuals, homes, businesses and, increasingly, other areas such as transportation. In a more connected and digital future, we will rely more on electricity, not less. As a power company that generates and sells electricity, I recognize the great responsibility we have in enabling this future.

Serving this important societal need is one of the pillars of building a sustainable business, but it is not enough. Sustainability needs to be more than a single target or objective. It must be a philosophy fully integrated into all parts of an organization - the glue that keeps internal and external stakeholders working together toward a common goal with purpose. This is sustainability at NRG.

2017 was a year of change. We saw a notable shift in the way businesses interact with society. From climate change to social issues, corporations took leadership positions and leveraged their influential platforms to address some of today's most pressing societal needs. More than ever, businesses are proving that sustainability is good business. They are providing a voice, taking a stance and using their resources to generate positive outcomes.

NRG had its own changes in 2017. We announced a company-wide transformation plan that aimed to shore up our financial footing, streamline our operations and better position us to achieve our long-term vision. We are well underway in executing our plan and ensuring we can provide electricity to our customers in a safe, reliable, affordable and increasingly customized way.

This focus on business and operational resiliency is only half of our story. Our commitment to good corporate citizenship and to a broader set of objectives is what will truly transform our business. These commitments have not slowed or changed in any way since we announced our transformation plan. In fact, I believe they strengthen us as an organization and are imperative to our long-term success.

In the midst of all this change, we also made significant progress on our sustainability commitments this year. We are already 70% of the way to our 2030 carbon-reduction target and have already achieved our goal to reduce water use 40% by 2030. That is 13 years earlier than planned! We accomplished all of this while keeping safety our number-one priority. In fact, we had our second-best safety year in company history and I could not be more proud of this achievement.

One of the most important ways we can deliver results is through the support and service of the communities where we live and work. In the days leading up to and the weeks following Hurricane Harvey, there was a tireless effort to make sure our power plants were able to keep the lights on and our retail business was there to serve our customers in a time of great need. All while many of our employees were also directly affected by the strong winds and rising waters. I am humbled by the hard work and the gestures of humanity displayed by my colleagues for those impacted by this devastating storm.

I am excited about the path we are forging at NRG. Our business is shifting to one of greater customer focus and empowerment, and we're strengthening our commitment to reliable, affordable and cleaner power. These steps are integral to a sustainable energy future that we can all take part in — and we at NRG are proud to be leading the way.



MAURICIO GUTIERREZ

**Mauricio Gutierrez**  
President and Chief Executive Officer



BRUNO SARDA

**Bruno Sarda**  
Vice President, Sustainability

**It is with pride that I introduce to you, our stakeholders, our second Sustainability Report since I joined NRG.**

In it, we outline our 2017 sustainability accomplishments, along with a comprehensive view of the actions we've taken across our value chain to enhance the resilience of our operations and create value for our customers and shareholders.

In last year's report, we introduced a new sustainability strategy, cutting across five organizational pillars: customers, workplace, business, operations and suppliers.

In 2017, we took this framework from concept to implementation, allowing us to take a more holistic view of our business and demonstrate that sustainability is indeed foundational to our overall value proposition.

So how did we do?

As we transformed our **business**, we doubled down on our commitment to transparency and responsibility while further integrating sustainability across organizational functions and proactively engaging stakeholders. Our inaugural report using the Sustainability Accounting Standards Board (SASB) was widely praised by the investment community.

We've now helped our **customers** avoid over 70 million tons of greenhouse emissions through NRG low-carbon residential and business solutions. Electric vehicle owners in Texas can choose a Reliant electricity plan specifically designed for their needs. In addition to what we offer, we've taken everything we've learned as a sustainability trailblazer and turned it into an advisory service to help businesses, academic institutions and municipalities assess how to achieve their sustainability and energy objectives more quickly and cost-effectively.

We also made great strides in engaging our **suppliers** and taking a leading role in our sector's efforts to enhance sustainability in the supply chain. We completed a comprehensive materiality and footprint analysis and were pleased to be recognized as a Supply Chain Engagement leader by CDP.

Notable progress was made across NRG's power generation **operations**. I'm thrilled to report we're now 70% of the way to our 2030 GHG reduction goal and actually achieved our 2030 water reduction goal. And most importantly, our team accomplished these milestones with a stellar safety record.

In our **workplace**, employees once again rose to the challenge, volunteering in their communities and implementing sustainability initiatives around the company. 2017 was a uniquely trying year for many, with a large number of our Gulf Coast team members affected by Hurricane Harvey. Across the organization, we saw employees band together to support each other and impacted communities during and after the storm.

In 2018, we will keep driving execution across our five pillars, with several areas of focus:

- Accelerating the power of our integrated retail platform to help customers large and small achieve more sustainable energy outcomes faster, cheaper and on their terms;
- Internalizing the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) to meet investor expectations;
- Using the UN's Sustainable Development Goals as our guide to societal progress

Our sustainable future won't simply be built, we have to design it. Our customers want to take their energy future into their own hands and our entire organization is working hard to make sure they're successful. Let's continue to pursue the future we want, together.

## Sustainability at NRG

Sustainability is at the heart of NRG's mission. It is a business opportunity to meet evolving market demands in a rapidly changing industry. Our sustainability efforts focus on driving business results, reducing risk and enhancing our brand value. To help create a sustainable energy future, we prioritize our work into five key pillars:

- 1 SUSTAINABLE **BUSINESS**
- 2 SUSTAINABLE **CUSTOMERS**
- 3 SUSTAINABLE **SUPPLIERS**
- 4 SUSTAINABLE **OPERATIONS**
- 5 SUSTAINABLE **WORKPLACE**

Our sustainability efforts closely align with our business lines and are organized with cross-functional engagement and strong governance. Each pillar comprises business activities that create value for NRG and its stakeholders.

We are committed to positively affecting our communities and reducing the environmental footprint of our fleet while ensuring long-term competitiveness. That includes providing sustainable energy solutions to businesses and residential customers, retrofitting existing plants with environmental controls, executing coal-to-gas conversions and evaluating carbon capture technologies. Most importantly, we maintain an unwavering commitment to safety and reliability. +

### NRG at a Glance



50  
States (plus DC)  
where we do business

FORTUNE  
500  
company



Nearly  
3 million  
customers



51  
Generating assets  
in 15 states



Nearly  
6,000  
full-time employees



63  
TWhs  
served by residential retail



Over  
\$10 billion  
in revenue



The nation's  
Leading  
integrated competitive  
power generator

### Sustainability Achievements



↓35%  
GHG emissions  
reduction from  
2014 baseline



~70 million  
tons  
of customer GHG  
emissions avoided



40%  
Reduction  
in water withdrawal  
(from 2014)



0.57  
2nd-best  
year-end incident rate



22%  
Reduction  
in revenue carbon intensity  
(since 2014)



8  
Facilities  
with VPP Star rating



<25%  
Revenue  
from coal generation



1st  
U.S. based  
power producer  
awarded CDP Supply Chain  
Engagement A rating



Climate  
Leadership  
Award  
from Climate Registry  
and U.S. EPA for Excellence  
in GHG Management

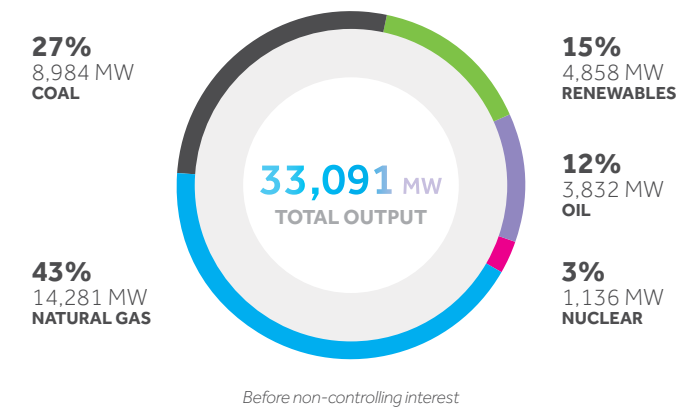
All figures as of Dec. 31, 2017

### GOALS

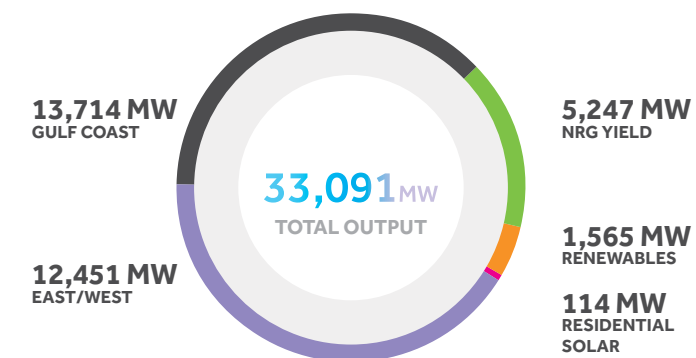
Ensuring success and clearly communicating our ambition requires setting goals and tracking and reporting progress. To keep our message clear, we will not set public goals for every key performance indicator we track. NRG's corporate sustainability program is ambitious, comprehensive and continually evaluated based on key issue assessments and emerging risks and opportunities. +



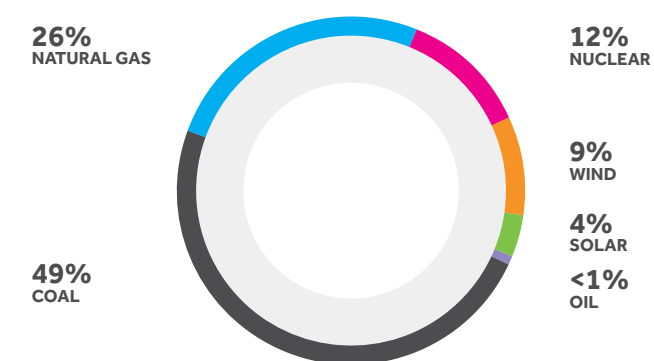
NORTH AMERICA PORTFOLIO  
Total generation capacity by fuel type



NORTH AMERICA PORTFOLIO  
Total generation capacity by region



NORTH AMERICA PORTFOLIO  
Net generation performance by fuel type



All charts as of Dec. 31, 2017<sup>19</sup>

<sup>19</sup> For all statistics reported in this document, GenOn has been deconsolidated including financial, employee and operational information.

# SUSTAINABILITY CONTEXT

NRG's vision is to create a sustainable energy future. For us, that means that our mission every day is to safely power the American economy with reliable and cleaner electricity.

We're focused on creating value for our shareholders today and into the future. To do so, we must stay abreast of the greatest forces of change in our industry and adapt our business accordingly. As part of that effort, we've identified national and global trends most relevant to NRG.

1. Political and regulatory uncertainty
2. Climate Change in action
3. Rise of sustainable investing and radical transparency expectations
4. Technological advances and cybersecurity
5. Demand for renewables
6. Sustainable procurement and supply chain engagement
7. Societal shifts

## 1. Political and regulatory uncertainty

In 2017, the United States faced turbulent political dynamics and new leadership priorities. This makes long-term strategic planning difficult for corporations whose investment timescales are much longer than election cycles. The role and extent of environmental regulation on our business operations and infrastructure, for example, remains uncertain. For the power sector, one of the most notable changes in 2017 pertained to the Clean Power Plan, or CPP, a rule promulgated by the Obama Administration to address greenhouse gas (GHG) emissions from existing fossil-fuel fired electric generating units. The EPA is currently revisiting the rule. NRG believes that while any near-term federal regulation of GHG emissions is unlikely, sub-national parties, particularly states and cities, are increasing their own efforts to curb emissions.

Another example is the mercury and air toxics standards (MATS) rule, which established limits for emissions of hazardous air pollutants from coal and oil-fired electric generating units, is being reviewed by the EPA to determine whether it should reconsider all or part of the rule. While NRG cannot predict the final outcome of this rulemaking, we have already invested in pollution controls and cleaner technologies, and thus our fleet is well-positioned to comply with the MATS rule.

Other actions at the federal and state level creating additional uncertainty for the energy markets include 45Q tax credits for carbon capture<sup>7</sup>, attempts at market distortions to benefit coal and nuclear (for example, Federal Energy Regulatory Commission's Notice of Proposed Rulemaking<sup>8</sup> and New York's zero emissions credits), and tariffs on imported solar panels.<sup>9</sup>

While advancing a sustainable energy strategy will be driven by business decisions, NRG welcomes regulation that aligns with our vision of a sustainable energy future while respecting the integrity of competitive markets and expanding customer choice. Learn more about NRG's policy engagement efforts [here](#).

## 2. Climate Change in action

2017 saw its share of the kind of extreme weather events predicted to increase as a result of climate change, including hurricanes, flooding, wild fires and mudslides. NRG felt this close to home, especially during Hurricane Harvey, which significantly impacted our Houston and Gulf Coast assets and employees (to read more about NRG's experience, please review our [Lesson of Nature](#) section. Changes in weather or other environmental conditions, such as temperature and precipitation levels, can affect electricity demand, presenting both business risks and opportunities. However, the potential for increased frequency and severity of storms, floods and other climatic events can disrupt

our operations and cause us, and our customers, to incur significant costs if not adequately mitigated.

The extreme weather of 2017 highlighted new levels of financial, operational and human vulnerability. Electric power companies, in particular, need to build resilience in the face of climate change, water scarcity, and related disruptions – both in their own operations, infrastructure, supply chains; and in the communities in which they operate and invest. Attending to this issue will involve the skills and knowledge of business, as part of a comprehensive resiliency solution; mitigating risk and ensuring business continuity.

Also in 2017, the United States' decision to withdraw from the Paris climate accord sparked engagement and action across the business world and at the local/state level. This Federal decision catalyzed an effort by some states, cities and businesses, galvanizing them to act on their own. Many companies, big and small, are examining their own commitments to combating climate change. Critical questions now center on how to build resilience into human and natural systems while mitigating further damage, and how to adapt and thrive amid the inevitable disruption.

NRG was one of more than 2,000 organizations to sign the "We Are Still In" declaration which demonstrates commitment to following through on the promise of the Paris Agreement and America's contribution to it. To read more about NRG's Climate Change Principles, please see [Appendix C](#).

<sup>7</sup> <https://www.forbes.com/sites/kensilverstein/2018/02/15/tax-credit-may-rev-up-carbon-capture-and-sequestration-technology/#5f385dca4a06>

<sup>8</sup> <https://www.forbes.com/sites/joshuarhodes/2018/01/08/perry-says-nopr-ferc-says-nope-to-propping-up-coal/#41a54cd06b0b>

<sup>9</sup> <https://pv-magazine-usa.com/2017/12/14/trump-versus-solar/>



### 3. Rise of sustainable investing and radical transparency expectations

Some prominent institutional investors continued their emphasis on strong, climate-related governance, goal-setting, strategy execution, and disclosure by companies. Perhaps most notable is the Climate Action 100+ initiative, launched in December 2017 by a coalition of 225 global investors with \$26 trillion in assets under management who commit to engage with large emitters on their management and disclosure of climate risks (globally, more than one out of every four dollars under professional management is invested using sustainable strategies<sup>11</sup>). In August, Vanguard, one of the world's largest investment management companies with \$4.4 trillion in assets, issued an open letter calling on public companies to "embrace the disclosure of sustainability risks that bear on a company's long-term value creation prospects," using a suitable framework like the SASB standards.<sup>12</sup>

Associated with this push is the growing expectation that companies in any sector with exposure to climate risk (and opportunity) will begin to develop robust climate-related scenario analyses to help guide longer-term decision making. In December 2015, the Financial Stability Board (FSB) established the Task Force on Climate-related Financial Disclosures (TCFD)<sup>13</sup> to develop decision-useful climate-related disclosure recommendations. The final

recommendations were published in mid-2017 and the TCFD has secured attention by investors and issuers. NRG is one of more than 240 organizations that publically committed to support the TCFD. More about NRG's approach can be found in the 'Scenario analysis and climate risk' section of this report.

Meanwhile, U.S. corporations are seeking deeper alignment to, and reporting on, the United Nations Sustainable Development Goals (SDGs). The SDGs have resonated strongly with businesses worldwide in the less than two years since their launch. Many are linking corporate responsibility activities to the SDGs to demonstrate how they are contributing to creating value.

As an issuer, NRG recognizes and supports enhanced sustainability disclosure. At the same time, the reporting landscape is crowded and fractured with a lack of auditable standards and accounting practices for ESG factors. We are doing our part to ensure our organization is in touch with global reporting trends and in good position to anticipate and respond to change. As demands for disclosure continue to grow, we are engaging with key stakeholders and evaluating internal reporting systems so we are able to disclose the necessary and relevant ESG information in a concise, credible and comparable fashion.

### 4. Technological advances and cybersecurity

The evolution of the power industry continues, largely driven by advances in the Internet of Things and smart-grid technologies, the electrification of transportation, battery storage, rapid advances in renewable energy systems and controllable demand. Clean technology continues to be more economical. Yet, while energy storage technology is improving, it is still not mature. Power systems around the globe are embracing new concepts like decentralization, automation and digitization. Driven by technological advancements, today's energy generation is trending toward more flexible, cost-effective renewable generation supported by battery storage and fast-start, natural gas peaker plants that can turn on and off in minutes, not hours or days.

Blockchain has emerged as a promising technology and another catalyst of the energy transition as it relates to trading Renewable Energy Certificates (RECs), which are sometimes transacted through nontransparent trading schemes. The concept of blockchain basically comes down to it being a distributed ledger, which provides

transparency, security and irreversibility – thus building peer-to-peer trust. While still a nascent concept, there are already more than 80 companies and pilot projects around the world working with blockchain and energy.<sup>14</sup>

Forbes magazine boldly stated in late 2017 that "cybersecurity is a business risk, not just an IT problem."<sup>15</sup> Electrification of the economy will be supported by the power sector. This creates opportunity while increasing exposure to possible threats. For example, in May 2017 a ransomware attack affected the electrical sector in India and the attackers were able to gain remote access and demand money from two different utilities in order to restore operator functionality. Given that electricity is the lifeblood of the modern society, a successful attack on the U.S. power grid would be a severe disruption and could cause widespread power failures, undermine national defense and other vital systems, and hurt the economy. As a result, the entire sector is mobilized to mitigate any such threat. Reputational risk is also driving enhanced awareness and investment. As customers demand a higher level of service experience and customized power choices, reputation and public image become increasingly vital to customer-centric business operations.



<sup>14</sup> <https://www.solarplaza.com/channels/future-grid/11757/2017-year-review-blockchain-energy/>

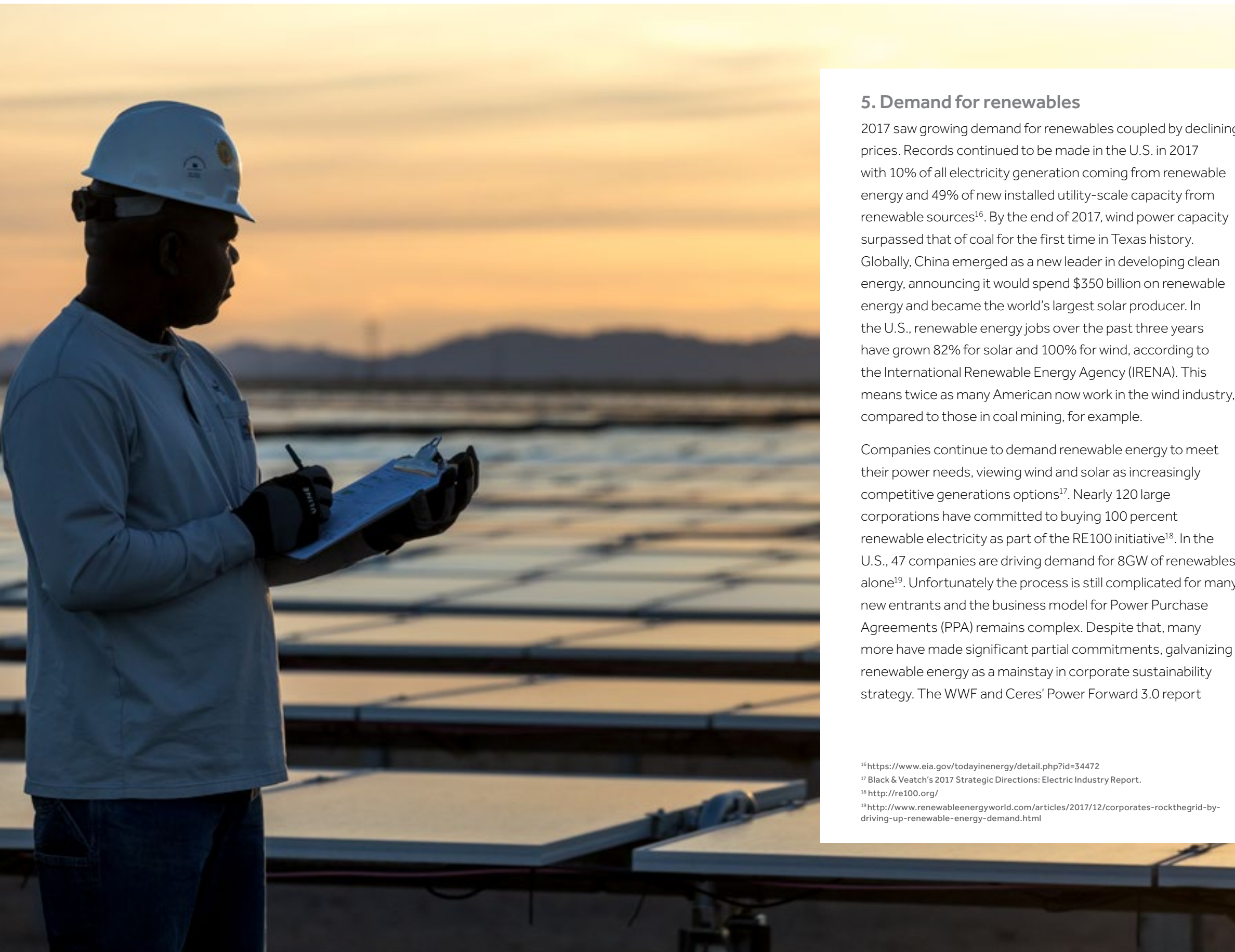
<sup>15</sup> <https://www.forbes.com/sites/edelmantechnology/2017/10/11/cyber-security-is-a-business-risk-not-just-an-it-problem/#275372977832>

<sup>11</sup> Global Sustainable Investment Alliance, 2016 Global Sustainable Investment Review (2016)

<sup>12</sup> SASB 2017 State of Disclosure, pg. 2

<sup>13</sup> <https://www.fsb-tcfd.org/tcfd-supporters-february-2018/>





## 5. Demand for renewables

2017 saw growing demand for renewables coupled by declining prices. Records continued to be made in the U.S. in 2017 with 10% of all electricity generation coming from renewable energy and 49% of new installed utility-scale capacity from renewable sources<sup>16</sup>. By the end of 2017, wind power capacity surpassed that of coal for the first time in Texas history. Globally, China emerged as a new leader in developing clean energy, announcing it would spend \$350 billion on renewable energy and became the world's largest solar producer. In the U.S., renewable energy jobs over the past three years have grown 82% for solar and 100% for wind, according to the International Renewable Energy Agency (IRENA). This means twice as many American now work in the wind industry, compared to those in coal mining, for example.

Companies continue to demand renewable energy to meet their power needs, viewing wind and solar as increasingly competitive generations options<sup>17</sup>. Nearly 120 large corporations have committed to buying 100 percent renewable electricity as part of the RE100 initiative<sup>18</sup>. In the U.S., 47 companies are driving demand for 8GW of renewables alone<sup>19</sup>. Unfortunately the process is still complicated for many new entrants and the business model for Power Purchase Agreements (PPA) remains complex. Despite that, many more have made significant partial commitments, galvanizing renewable energy as a mainstay in corporate sustainability strategy. The WWF and Ceres' Power Forward 3.0 report

shows that almost half of Fortune 500 companies and a majority of the Fortune 100 now have climate and energy targets. More than 70 large companies have signed on to the Renewable Energy Buyers' Principles, which tell utilities and other suppliers what industry-leading, multinational companies are looking for when buying renewable energy from the grid.

Traditional electric utilities also appear to be embracing the transition to more renewable power. A combination of state clean-power mandates and federal subsidies helped to increase the market, as in Hawaii which passed into law a requirement that 100 percent of its energy supply will come from renewables by 2050. In California, the state increased its renewable commitment significantly in 2017, after putting itself in position to meet its initial 2030 goal more than 10 years ahead of schedule. As electric utilities learn to adapt to the new realities of decentralized supply, they will have to offer unique and customized solutions that go beyond just keeping the lights on.

Even as NRG divests from renewable energy development, we continue to believe in the importance of the growth of renewable energy capacity in our sector. We realize our customers want more cleaner energy and our goal is to make energy procurement and management easy for them. You can learn more about our [Transformation Plan](#) in the Sustainable Business section.

<sup>16</sup><https://www.eia.gov/todayinenergy/detail.php?id=34472>

<sup>17</sup> Black & Veatch's 2017 Strategic Directions: Electric Industry Report.

<sup>18</sup> <http://re100.org/>

<sup>19</sup> <http://www.renewableenergyworld.com/articles/2017/12/corporates-rockthegrid-by-driving-up-renewable-energy-demand.html>

## 6. Sustainable procurement and supply chain engagement

Businesses are increasingly taking action to ensure their supply chains are transparent, resilient, and socially and environmentally responsible. Industries are developing standards and frameworks for sourcing and distributing their products through organizations such as the Sustainable Apparel Coalition, the Responsible Business Alliance and the Sustainable Purchasing Leadership Council. Strong management of upstream and downstream operations can lead to reduced operational and reputational risk and unlock opportunities for collaboration between customer and vendor.

Multinational corporations such as Walmart have set science-based targets to gradually remove emissions from their supply chain. Their 'Project Gigaton' set a new north star for reducing upstream emissions. Beyond the scale, what is also unique about this effort is that Walmart is requiring each supplier to set a goal that fits within their own sustainability program. Achieving such goals requires a concerted effort by entities throughout a company's supply chain. Additionally, heightened public scrutiny of sourcing increases companies' reputational risks if not adequately addressed. That makes supplier standards and codes of conduct, which commonly include criteria for diversity, gender equality and labor rights, important tools for companies focused on sustainability.

The power sector is resource-intensive with complex supply chains and is not yet as mature in sustainable supply chain strategies as some other sectors. In the U.S., there are strong efforts around supply management of transmission and distribution, but not around fuel commodities. To encourage responsible natural gas production, NRG joined with eight other large natural gas buyers to form the Natural Gas Supply Collaborative. The Collaborative issued a report calling on natural gas producers to disclose information related to methane and air emissions, water, chemicals, and community health and safety. Read more about our strategy in the [Sustainable Suppliers](#) section.

## 7. Societal shifts

2017 was also a banner year for social movements, with businesses often in the spotlight for better or worse. In the past year, many businesses have stood as advocates for positive social change. To succeed in the future, corporations must demonstrate how they are listening to their stakeholders and building trust, not only for short-term financial gain, but for long-term strategic agendas. This will entail navigating emerging issues and adopting new approaches to adapt to the sometimes inconsistent governance and policy approaches in the regions where they operate.

### Diversity and inclusion

As Americans are increasingly divided on politics, some businesses took the opportunity to take moral stands after pressure from their employees and customers. In advocacy of women's rights, immigration reform, reproductive rights, the environment, LGBTQ rights, racial equality and freedom of religion, the Women's March worldwide demonstrations on January 21, 2017 represented the largest single-day protest in the history of the U.S. The #MeToo movement went viral, demonstrating the widespread prevalence of sexual assault and harassment, especially in the workplace. The leaders



of this movement were later named as Time magazine's "Person of the Year" for 2017. This has galvanized a grassroots movement for more female leadership in politics and business. There is an unprecedented surge of first-time female candidates running for national, state and local offices – ranging from U.S. Senate and state legislatures to local school boards. At least 79 women are exploring runs for governor in 2018, potentially doubling the record for female candidates set in 1994, according to the Center for American Women and Politics at Rutgers University.

NRG is committed to creating a safe, welcoming and rewarding workplace that creates a productive environment for every employee. We are proud to be the first U.S. energy company to be a signatory to the UN's Women Empowerment Principles, and though we are committed to further improvement, we were honored to receive a Forbes Diversity award.

### Workforce of the future

Millennials will soon overtake baby boomers as the largest age block in the U.S. workforce. Studies repeatedly show that corporate social responsibility is a top priority not just for the hiring and retention of millennials, but also for the workforce in general. To succeed now and in the future, employers must be able to attract and retain the best talent. In addition, millennials could be worth up to \$24 trillion by 2020. Millennial wealth will come from inheritance, entrepreneurial activity and income gains. To attract capital and remain financially attractive, targeting millennials will be an important outreach component for the power sector. To be successful will require appealing to their priorities and values, which largely focus on sustainability.✚

# PERFORMANCE

## Overview

In 2017, sustainability continued to drive our company, its structure, our operations and, perhaps most importantly, our performance.

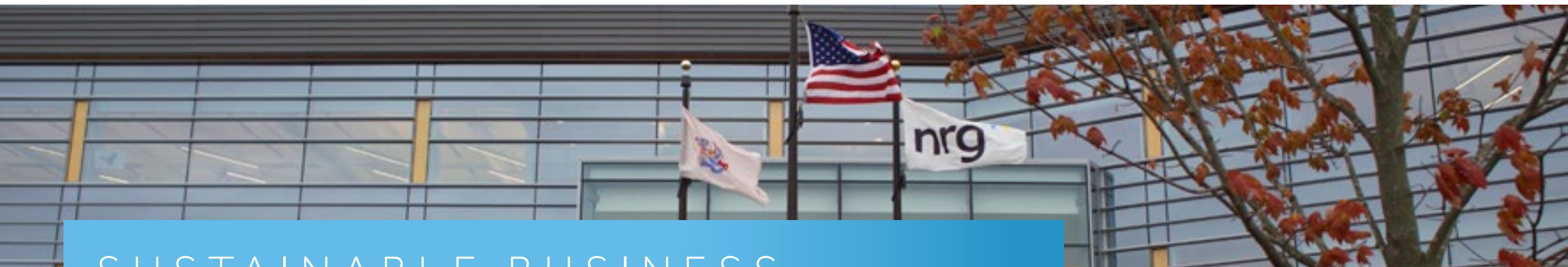
Structurally, it is reinforced by five key pillars – the foundation of our sustainability strategy and the organizing framework of this report:

- 1 Sustainable **Business**
- 2 Sustainable **Customers**
- 3 Sustainable **Suppliers**
- 4 Sustainable **Operations**
- 5 Sustainable **Workplace**

In terms of performance, sustainability was reinforced in many tangible ways in 2017, summarized below and illustrated throughout this report:

- Progress toward publically stated goals
- Metrics relating to key performance indicators
- Third-party recognition and accolades
- Employee contributions and involvement in the community +





# SUSTAINABLE BUSINESS

As with other organizations that have chosen to make sustainability part of their strategic imperative, sustainability at NRG means driving business results, reducing risk and enhancing the company's brand value. Sustainable Business lies at the core of our five-pillar strategy because it encompasses initiatives that embed sustainability in the organization. This includes our objectives for NRG to be recognized as a leader on transparency to measure key sustainable business goals and to manage stakeholder engagement. Our Sustainable Business strategy ties financial performance with our decarbonization efforts. It also advances dialogue around future corporate reporting while engaging with our broad stakeholder network. This is supported by a strong governance structure that starts with the Board of Directors and the CEO and extends to all business leaders within our organization.

## Governance

To further integrate sustainability into our business, we have established a robust system of governance and information gathering to help us determine where to make changes in our sustainability strategy, how to manage priorities and how to engage our investors and stakeholders. Learn more about NRG's corporate governance [here](#).

## Board of Directors oversight

In 2017, our board's Governance and Nominating Committee continued to include corporate sustainability in its oversight. The committee oversees NRG's sustainability priorities and initiatives, to whom NRG's VP of Sustainability periodically presents updates. Learn more about committee composition [here](#).

## Corporate sustainability governance structure

For sustainability to be embedded into our organizational strategy, it needs to be championed by our business leaders and integrated into our core operations. To ensure executive and operational buy-in, NRG's sustainability team manages our day-to-day efforts while also developing and guiding long-term strategy.

Further, the sustainability team has access to a CEO-led executive steering committee to guide the development, integration and implementation of our strategy. The committee is available to review strategic priorities throughout the year for specific implementation needs, however in 2017, even though all committee members were consulted and engaged individually, this committee did not formally convene due to the focus on NRG's Transformation Plan execution. +

## Stakeholder engagement

We must focus on disciplined strategies and smart capital allocation while adhering to the needs and concerns of our stakeholders. Key stakeholders include our customers, employees, investors, media, regulators, ratings and rankings organizations, industry associations, NGOs and suppliers.

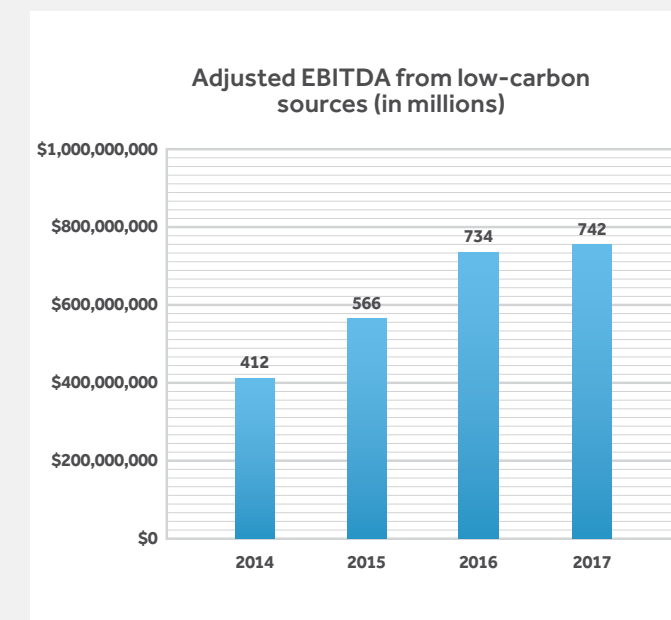
To strengthen our relationship with stakeholders, we actively seek opportunities to engage with them and foster a collaborative dialogue. In support of this effort, NRG in late 2016 became a member of Ceres, a highly respected nonprofit organization whose mission is to "mobilize investor and business leadership to build a thriving, sustainable, global economy." With Ceres, we've set up a formal Stakeholder Advisory body, which includes some of our key investors, customers, leading NGOs, policy groups, and energy experts. The group constructively engages with us and provides us useful feedback on how we can ensure alignment with expectations both commercial and otherwise. In 2017, the Ceres Stakeholder Advisory group formally convened for the first time and met with key NRG leaders in person at our headquarters in Princeton, NJ and held several subsequent telephone calls.

## Goals and performance

### Our Sustainable Business goals are to:

- Continue growing Adjusted EBITDA<sup>20</sup> from low-carbon sources<sup>21</sup>
- Continue reducing revenue carbon intensity (Mt CO<sub>2</sub>e/\$1M revenue)<sup>22</sup>
- Lead our sector in sustainability transparency and disclosure<sup>23</sup>

In 2017, we continued the upward trend of increased Adjusted EBITDA from low-carbon sources<sup>24</sup>.



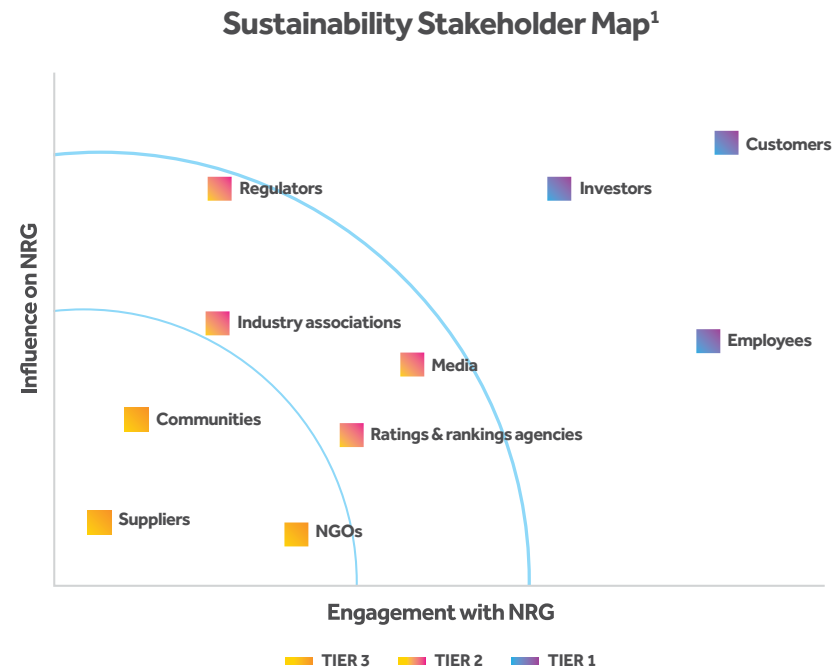
<sup>20</sup> Adjusted EBITDA is a non-GAAP financial measure. This measurement is not recognized in accordance with GAAP and should not be viewed as an alternative to GAAP measures of performance. The presentation of Adjusted EBITDA should not be construed as an inference that NRG's future results will be unaffected by unusual or non-recurring items. See Appendix A for Adjusted EBITDA from low carbon sources Reg G results.

<sup>21</sup> This includes Adjusted EBITDA from fossil-fuel-free power generation. It does not include nuclear or technologies that specifically avoid emissions or increase efficiency.

<sup>22</sup> Revenues used are as reported in our annual Form 10-K filings.

<sup>23</sup> Sector is defined as electric utility or independent power producer industry. Progress will be measured according to stakeholder feedback, particularly through investor relations and participation in reporting and disclosure organizations such as GRI, Ceres and SASB.

<sup>24</sup> At the time of publication of this report, there are operational changes to divest Renewables that are not reflected in this chart. This chart is of Dec. 31, 2017.



<sup>1</sup>This graphic is meant to be illustrative, not exhaustive, of key NRG stakeholders

The chart above illustrates our diverse system of stakeholders.

Since it is our goal to remain an industry leader on disclosure, we've conducted a thorough landscape review and sought feedback to ensure our disclosure efforts meet both stakeholder needs and ours. This feedback informed – and will continue to inform – our sustainability strategy priorities. This has been an important factor in our decision to move toward a restructured, more streamlined and more focused report.

### Member organizations

NRG proactively engages with other leading companies and organizations to share best practices, engage stakeholders and create action toward a sustainable economy. To that end, in 2017 NRG was a member of several sustainability-focused organizations, including the following:

- Business for Social Responsibility (BSR) Future of Reporting
- Ceres
- Corporate Eco Forum
- Corporate Responsibility Association
- Electric Power Research Institute's Energy Sustainability Interest Group
- GreenBiz Executive Network
- GRI GOLD Community
- Rocky Mountain Institute Business Renewables Center
- Sustainability Accounting Standards Board Alliance
- Sustainable Leadership Forum

### Policy engagement

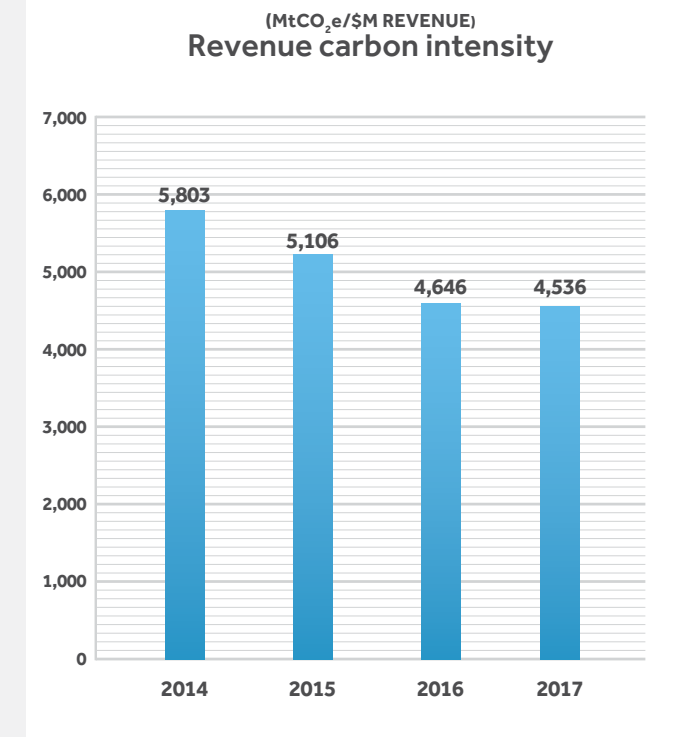
As a leading integrated competitive power company, NRG believes competitive markets drive innovation, promote greater consumer choice, encourage efficient investment in infrastructure and ensure reliable, reasonably priced electricity supplies. Successful competitive markets require policymakers to put in place market rules that encourage private capital investment and reward beneficial attributes of diverse technologies.

In wholesale power markets, several market participants and states have recently shown support for out-of-market contracts and subsidies to keep otherwise uneconomic power plants from retiring. That runs counter to the fundamental principles of competitive markets that are intended to keep efficient units online and force inefficient and uneconomic units to retire. These actions harm the market and the entire value chain of energy generation and consumption while also suppressing innovation.

Competition is just as important on the retail side, and we will continue to push for market mechanisms that encourage diverse offerings and consumer choice. For both parts of our business, generation and retail, we will continue to be a vocal advocate of customer choice and competitive markets.

We engage directly with policymakers in Washington, D.C. and at the State level, and indirectly through 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. We support meaningful congressional and regulatory actions to mitigate GHG emissions, as well as policies that foment the development and deployment of competitive low-carbon power generation technologies. We have a history of supporting climate change legislation and incentives for clean energy solutions. We also engage with local and national environmental groups to collaborate on environmental programs, such as offering members exclusive renewable energy products. Learn more about our policy engagement efforts [here](#). +

## Goals and performance



In 2017, we continued to showcase our industry leadership in sustainability disclosure and transparency:



**One of 13 US companies, and the only energy company, named in CDP 2017 A-list for Excellence in Water Leadership**



**1st U.S. based power producer awarded CDP Supply Chain Engagement A-rating**



**1st U.S. based power producer to publish a Sustainability Accounting Standards Board (SASB) report**



**Climate Leadership Award from Climate Registry and US EPA for Excellence in GHG Management**



**WBCSD Reporting Excellence award**

## Reporting

The voluntary reporting landscape is evolving rapidly. We aim to actively participate in enhanced disclosure of key issues and work to achieve transparency as we create opportunities for progress. Our investors, customers and other stakeholders tell us that sustainability reporting is a critical ingredient of productive partnerships. Incorporating environmental, social and governance issues in our reporting tells a clear management story and helps inform long-term decision-making.



### About this report

This sustainability report is based on NRG corporate performance for all operations in calendar year 2017 and, where stated, "NRG" refers to NRG Energy, Inc., as well as its affiliates that include assets owned by NRG Energy, Inc. and NRG Yield, Inc.<sup>25</sup> This, our eighth annual sustainability report, was developed with guidance of the GRI Standards at the Core level, as well as the GRI Electric Utilities Sector Supplement, which together provide a framework and guidance for best-in-class sustainability reporting. For the second year, NRG is a member of the GRI GOLD Community which supports our commitment to embed sustainability into our strategic decision-making and demonstrates reporting leadership in our sector. The report includes topics from the GRI framework for our sector that are deemed priority issues to the company. The scope of this report is primarily contained within the calendar year 2017, but some long-term projects and goals are discussed. NRG publishes a corporate sustainability report annually in both static and interactive PDF format. The NRG website provides visitors the latest news and events around the company's social, economic and environmental initiatives. See the [GRI Standards table](#) for a full list.

<sup>25</sup> Where discussed, emissions are rolled up for these purposes. GenOn has been deconsolidated from current and prior year data.



### SASB Standards table

2017 marked the second year NRG disclosed sustainability data using the provisional SASB standards. Although these standards are designed for disclosure in financial filings to the Securities and Exchange Commission, they have not yet been formally adopted for such use. The financial sector welcomes such disclosures, and as such we have included a table as part of our sustainability reporting. After reviewing the guidance at the beginning of each of the standards and the indicators for each of the sectors, we identified the Infrastructure Sector – Electric Utilities – as most applicable given the nature of our business. Please see [Appendix B](#) for the table. In 2017 NRG became a founding member of the SASB Alliance and provided feedback to codify the final standards.

### Scenario analysis and climate risk

Scenario planning is increasingly looked to as an effective exercise to address climate risk by enabling companies to communicate to stakeholders the impacts of their findings on their long-term capital expenditure plans. As mentioned previously, in 2015 the Financial Stability Board (FSB) created the Task Force on Climate-related Financial Disclosures (TCFD). In 2017, TCFD published their final recommendations. The TCFD, for voluntary adoption, helps investors identify which businesses are best equipped to gain from the transition, which are adapting to medium and long-term trends and can thus manage risks more effectively. Once implemented, the recommendations may help firms to better manage the risks in their portfolios. This, in turn, can reduce both physical risks and the risk of a late and abrupt transition. Figure 1 outlines four recommended disclosure guidelines applicable to organizations regardless of jurisdiction or sector.

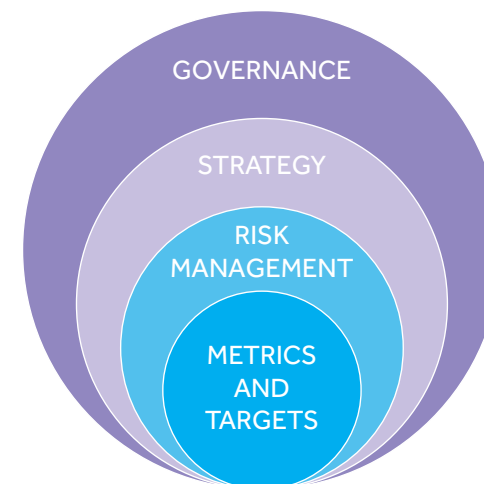


Figure 1: TCFD Disclosure Guidelines<sup>26</sup>

The scenario analysis exercise is a key recommendation of the Task Force. It recommends firms explore and disclose impact on their businesses, strategies and financial planning of different potential future scenarios. This is a means for businesses to develop and communicate their strategy and it can also help investors make more informed investment decisions. The TCFD's recommendation on scenario analysis can, over time, generate a dialogue between those that produce scenarios and those that use them for their disclosures.

NRG is one of more than 240 organizations that publically committed to support the TCFD.<sup>27</sup> In early 2017, NRG conducted an internal pilot of the draft TCFD recommendations on a single business unit. One of the goals of this exercise was to build internal subject matter expertise and identify existing activities that support the TCFD recommendations. The learnings from this exercise informed our company-wide comprehensive analysis and the implications for disclosing on climate risk and opportunities. NRG is proactively engaging with key

<sup>26</sup> Figure adapted from page v of Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures.

<sup>27</sup> <https://www.fsb-tcfid.org/tcfid-supporters-february-2018/>

#### GOVERNANCE

The organization's governance around climate-related risks and opportunities

#### STRATEGY

The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning

#### RISK MANAGEMENT

The processes used by the organization to identify, assess and manage climate-related risks

#### METRICS AND TARGETS

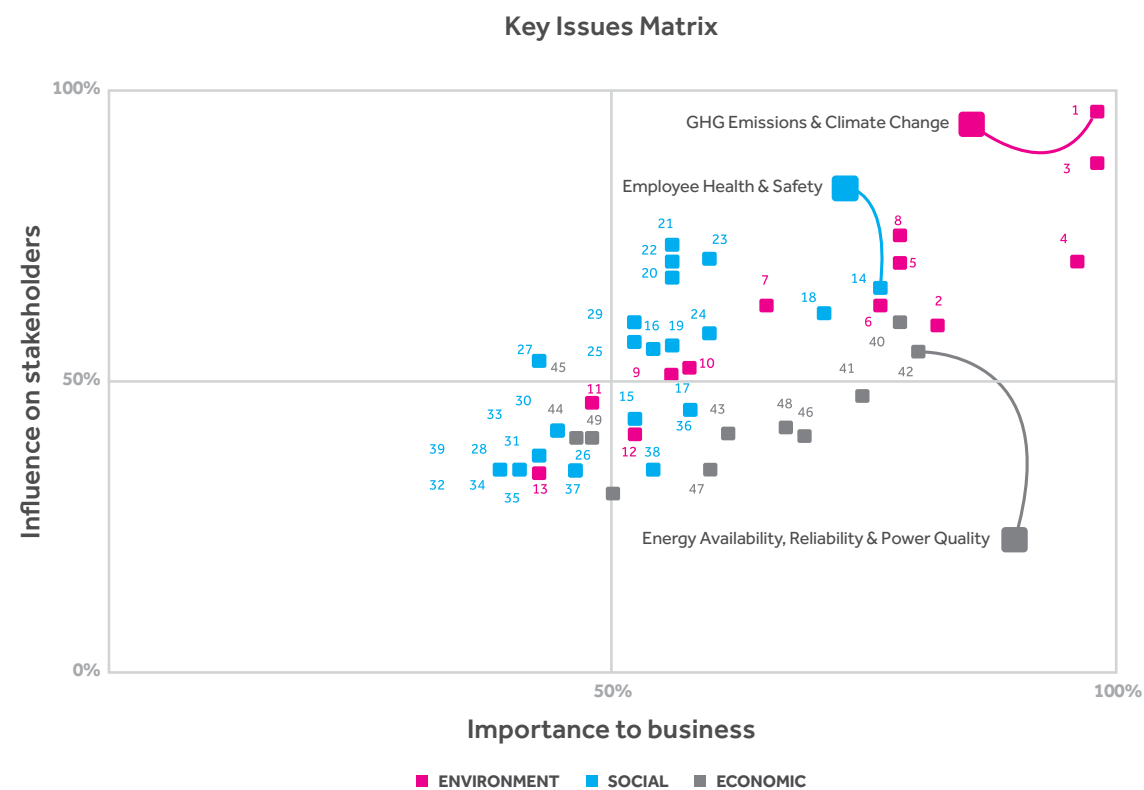
The metrics and targets used to assess and manage relevant climate-related risks and opportunities

stakeholders and preparing to develop internal guidelines on integrating the TCFD. We plan to build upon our robust voluntary reporting protocols, enterprise risk management process and shareholder engagement strategy.

To read the full report from the TCFD please visit this [site](#).

### Our process

Voluntary reporting at NRG is a dynamic and comprehensive effort involving dozens of internal subject-matter experts who are called upon to provide verified information for each of the topics within the reporting standards. The Sustainability group is responsible for managing the process and has been through a certified GRI G4 to GRI Standards transition course. The development of the report is vetted with key stakeholders who provide feedback on NRG's sustainability reporting strategy. Before publication the entire report is reviewed by key executives before final vetting by general counsel and the CEO. Select key metrics are third-party verified through a formal attestation (see our [third-party assurance statement](#)).



**Key issues**

For the purposes of sustainability reporting, NRG follows the Global Reporting Initiative (GRI) framework to report on issues of importance to the company and its stakeholders. As part of a re-evaluation of our sustainability strategy, in 2013, we engaged a third party to facilitate a formal assessment to determine these key issues. Our initial assessment identified 49 issues as important to stakeholders and the NRG business. Selecting which of these issues to report on then involved a series of internal workshops and fed into the process for feedback received from regular engagement with our external stakeholders (see key issues matrix above).

We revisit this assessment annually to determine the content for the Sustainability Report. Key issues for NRG as delineated by the GRI Standards for 2017 include:

- Biodiversity
- Compliance
- Effluents and waste
- Emissions
- Employment
- Energy
- Occupational health and safety
- Procurement practices (supply chain)
- Water

These topics aim to cover all NRG brands and businesses. We do recognize, however, that some of these topics are more relevant to certain parts of the organization than others. For example, most of the environmental disclosure is focused on our power-generating fleet since that is where we have the ability to make the most impact, with respect to climate change, through carbon-emission reduction. Relevant financial implications, as well as a discussion of risks and opportunities associated with some of these issues, can be found in Part 1, Item 1A in our 2017 Form 10-K. Additional financial statements or equivalent documents can be found [here](#).

**Key issues assessment**

Our key issues matrix identifies sustainability issues that are relevant to NRG’s current business and operating environment. While creating this matrix, NRG personnel interviewed more than 100 internal and external stakeholders – the results were synthesized into an executive briefing document shared with NRG leadership. For the purpose of the Sustainability Report, these findings were also compared with external best practice publications on metrics, such as the Electricity Producers Research Institute (EPRI) Metrics for the Electricity Producers Industry, the Financial Stability Board’s (FSB) Task Force on Climate Related Financial Disclosures (TCFD) and the Sustainability Accounting Standards Board (SASB). The end result confirmed that the key issues NRG was reporting against were indeed the most pressing issues for the company at the time, and they remain relevant today.

The resulting matrix (see chart) illustrates the social, environmental and economic issues that may have the greatest impact with regard to our business and stakeholders.

Today, we use this independent analysis to better inform business decisions and shape our voluntary reporting process. In 2018, we intend to conduct a comprehensive key issue assessment pending the progression of the NRG Transformation Plan elements and divestitures.



**Economic:**

Energy reliability, availability and power quality top our economic issues. The economic category includes issues that relate to the organization’s impacts on the economic conditions of its internal and external stakeholders and on economic systems at local, national and global levels.



**Environmental:**

As a large power producer in the U.S., we need to be conscious of greenhouse gas emissions and climate change. The environmental category includes issues that address the organization’s impact on living and non-living natural systems, including land, air, water and ecosystems.



**Social:**

With thousands of employees working at various types of facilities, employee health and safety are the key non-environmental issues. The social category encompasses issues concerning the impacts the organization has on the social systems within which it operates. +

## U.N. Sustainable Development Goals

The Sustainable Development Goals (SDGs) are a global set of goals, targets and indicators that United Nations member states, and increasingly businesses, are expected to use to frame agendas and policies surrounding development. The global community has given itself until 2030 to achieve the UN's 17 Sustainable Development Goals, which will require a significant contribution from the private sector and collaboration across industries.

Our core business and corporate strategy and vision directly align with two of the goals, 7 and 13.

The table below illustrates the various ways our activities align with these goals.



**7 AFFORDABLE AND CLEAN ENERGY**

Ensure access to affordable, reliable, sustainable and modern energy for all


---

**Empowered Customers**

- State of the art retail platform
- Plans and solutions for all needs and budgets
- 100% renewable plans offered in all our retail markets
- Advocate for competitive markets
- Champion of customer choice

**Sustainable Products**

- Flexible generation
- Onsite and offsite renewables
- Energy storage
- Demand response



**13 CLIMATE ACTION**

Take urgent action to combat climate change and its impacts

---

**Customer Solutions**

- Lower GHG emissions
- Added resilience
- Sustainable energy consulting
- Customer emissions avoidance goal

**Company Actions**

- Reduced GHG fleet emissions
- Science-based target
- Commitment to sustainable supply chain
- Carbon-capture innovation
- Climate-change principles

Our activities also support select additional SDGs. You can find examples within this report using the table below.

<p><b>3 GOOD HEALTH AND WELL-BEING</b></p> 	<p><b>5 GENDER EQUALITY</b></p> 	<p><b>6 CLEAN WATER AND SANITATION</b></p> 	<p><b>11 SUSTAINABLE CITIES AND COMMUNITIES</b></p> 	<p><b>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</b></p> 
<p>Ensure healthy lives and promote well-being for all ages</p> <hr/> <p><b>Sustainable Operations</b></p> <ul style="list-style-type: none"> <li>• Safety</li> </ul> <p><b>Sustainable Workplace</b></p> <ul style="list-style-type: none"> <li>• Wellness</li> <li>• positiveNRG</li> </ul>	<p>Achieve gender equality and empower all women and girls</p> <hr/> <p><b>Sustainable Workplace</b></p> <ul style="list-style-type: none"> <li>• Diversity</li> <li>• U.N. Women's Empowerment Principles</li> </ul>	<p>Ensure access to water and sanitation for all</p> <hr/> <p><b>Sustainable Operations</b></p> <ul style="list-style-type: none"> <li>• Water</li> <li>• Biodiversity</li> </ul>	<p>Make cities inclusive, safe, resilient and sustainable</p> <hr/> <p><b>Sustainable Operations</b></p> <ul style="list-style-type: none"> <li>• Renewables</li> </ul> <p><b>Sustainable Customers</b></p> <ul style="list-style-type: none"> <li>• Business Solutions</li> <li>• Retail</li> </ul> <p><b>Sustainable Workplace</b></p> <ul style="list-style-type: none"> <li>• positiveNRG</li> </ul>	<p>Ensure sustainable consumption and production patterns</p> <hr/> <p><b>Sustainable Operations</b></p> <ul style="list-style-type: none"> <li>• Coal combustion residuals</li> <li>• econrg</li> <li>• Effluents and waste</li> </ul> <p><b>Sustainable Suppliers</b></p> <ul style="list-style-type: none"> <li>• Goals and performance</li> </ul>





## NRG's Transformation Plan

In July 2017, NRG launched a three-year plan following a comprehensive evaluation of its businesses, assets and operations. The Transformation Plan is designed to strengthen the business and create shareholder value through a series of actions including operations and cost excellence, portfolio optimization, and capital structure and allocation. NRG expects significant completion of the Transformation Plan by the end of 2018. On February 7, 2018, NRG [announced](#) the sale/divestment of its Interest in NRG Yield, its Renewables Platform, ROFO Pipeline and its South Central Business.

**These sales are expected to close in the second half of 2018 and are not reflected in any of the reported 2017 results in this report.**

Sustainability remains the driving philosophy that underpins and informs value creation across all of our businesses and for all of our stakeholders. NRG remains committed to the reduction of GHG emissions by 50% by 2030, and by 90% by 2050, below a 2014 baseline. Meeting these goals was never going to be achieved by simply adding renewables to our portfolio, but rather by decarbonizing our conventional generation fleet. We are already 70% of the way to the 2030 goal and feel confident in our ability to achieve both goals. Further, our sustainability strategy goes beyond reducing operational GHG emissions and includes driving down emissions in our supply chain and customer footprints. With millions of customers, helping them decarbonize and achieve their sustainability goals will have a real impact. This demonstrates that sustainability at NRG is focused on long-term value creation – to drive business and results, reduce risk and ensure continuity. ✦

1

### OPERATIONS AND COST EXCELLENCE

- Streamline the cost structure and enhance earnings
- Significantly strengthen cost competitiveness against peer group
- Provide visible and achievable targets for cost, margin and working capital improvements

Enhance Cost Competitiveness

2

### PORTFOLIO OPTIMIZATION

- Optimize the portfolio and focus on the core business
- Unlock capital and reduce debt through asset sales and divestments
- Complete the announced sales of NRG's stake in NRG Yield and Renewables Platform, ROFO Pipeline, South Central Business and BETM

Simplify the Company and Unlock Capital

3

### CAPITAL STRUCTURE AND ALLOCATION

- Focus on achieving financial flexibility
- Adhere to a disciplined capital allocation approach
- Capital allocation prioritizes achieving and maintaining a top decile safety performance

Enhance Financial Flexibility

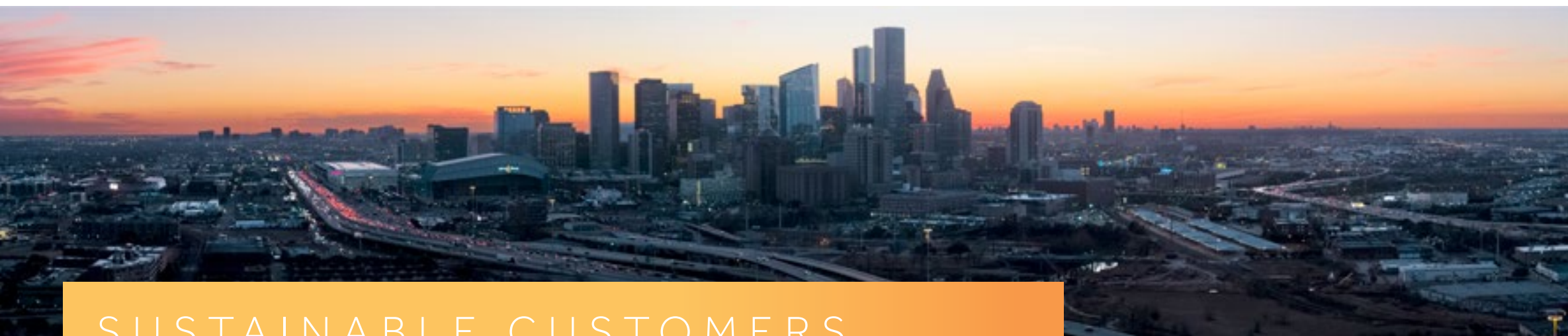
**The Transformation Plan provides targets to strengthen the business and create significant shareholder value**



### Third-party verification

NRG has chosen to voluntarily report on its corporate responsibility performance and has designed processes to collect and/or estimate, assess and report on this data. NRG management is responsible for the completeness, accuracy and validity of the information contained in this report. NRG has engaged a nationally recognized and registered public accounting firm to provide a limited assurance of our emissions inventory and water. Details of the statement of assurance can be found [here](#). ➕





# SUSTAINABLE CUSTOMERS

A key part of our business is to enable customers to achieve sustainable energy outcomes. In 2017, we provided energy consumers across two key segments - Residential and Small Business, and Commercial and Industrial - with access to cleaner, smarter energy choices.

## Residential and small business

To properly meet the needs of our customers' lifestyles and environmental goals, NRG's retail brands propose a variety of retail electricity plans, products and services. This portfolio is divided into three pillars of offerings:

- **Power and natural gas:** electricity, home solar, community solar and backup power
- **Services:** energy checkups, control and energy management, monitored security, home maintenance and installation
- **Portable Power:** portable solar, portable batteries, emergency and outdoor lighting, power stations, kiosks and chargers

In 2017, our residential retail business delivered nearly 42 terawatt-hours of energy and served approximately 3 million recurring customers in the competitive retail energy markets of Connecticut, Delaware, Illinois, Maryland, Massachusetts, New Jersey, New York, Ohio, Pennsylvania and Texas, as well as the District of Columbia. Collectively, that makes our retail business one

of the largest competitive mass-market energy retailers in the U.S. Retail consumers make purchase decisions based on a variety of factors, including price, customer service, brand, product choices and value-added features.

Through our broad range of service offerings and value propositions, NRG's Retail brands are able to attract, retain and increase the value of their customer relationships. Our retail brands are recognized for exemplary customer service, innovative smart energy and technology products and environmentally friendly solutions.

In the energy industry, competitive markets benefit customers in several ways. Competition encourages innovation, which empowers customers with more choices, increased cost efficiencies and higher-quality products and services. A central part of NRG's policy advocacy is to open up more U.S. markets to retail competition, as many U.S. energy buyers still have no choice in what they buy or who they buy it from. Competition, inherently, is positive and forces companies to look for better, more creative solutions.

## Commercial and industrial

Business customers are our partners. We bring to them our diverse portfolio of solutions and experience to create a customized and sustainable approach that is right for each partnership. Each approach is designed to meet energy goals for sustainability, resiliency and cost effectiveness.

Our Business Solutions team provides energy solutions in three main areas: distributed energy products and services, customized energy supply plans and sustainable energy approaches. Regardless of the solution, the overall goals are to give businesses greater reliability, cleaner power and more control over their energy costs. In many cases, it is not one solution, but a blended approach suited to the logistics of a partner's overall operations and day-to-day energy use. This is the power of NRG's integrated platform.

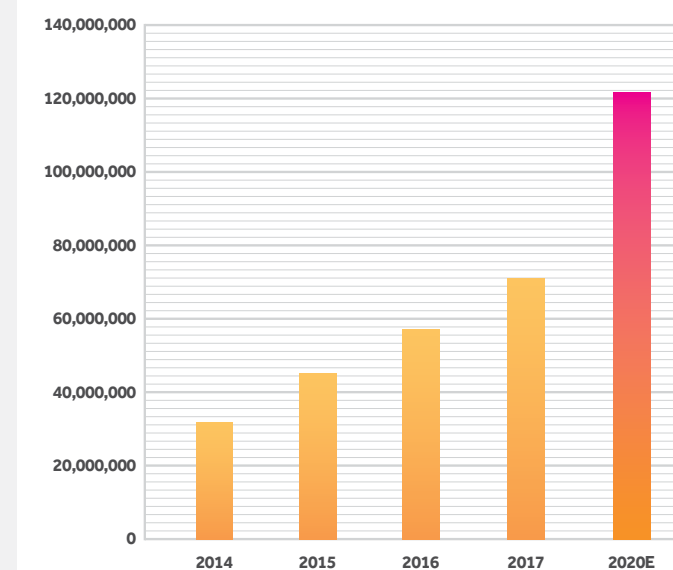
Commercial and residential energy consumers seek to lower their carbon footprint without increasing their costs. They look to the power sector for innovative, customizable solutions that can help them achieve those goals. That is why we continue to advocate for open power markets. In these markets, competition and innovation can attract the necessary capital to accelerate sustainable energy deployment while driving prices down. The idea that sustainable means more expensive is simply not true anymore. ✚

## Goals and performance

### Our Sustainable Customers goals are to:

- Help customers avoid 120 million Mt CO<sub>2</sub>e of GHG emissions by 2020<sup>28</sup>
- Make sustainability among the top reasons to choose NRG for 50 percent of our commercial and industrial (C&I) customers<sup>29</sup>

Avoided customer emissions from renewables (MTCO<sub>2</sub>)



We've helped customers avoid over 70M tons of CO<sub>2</sub>.

We have plenty of anecdotal feedback that customers value NRG's sustainability leadership in our sector so, we are developing a data-collection process to help us better measure and quantify this indicator and hope to have more to disclose in our 2018 report. ✚

<sup>28</sup> This is a cumulative absolute number based on the total renewable megawatt-hours generated by our Renewables, Business Solutions and Green Mountain Energy businesses.

<sup>29</sup> This will be measured through Voice of Customer mechanisms assessing why C&I customers chose us as their energy partner over other providers.

OUR DIFFERENTIATED BRANDS AND PRODUCTS ...

**Our Brands**



**Our Products and Services**



**Residential Solutions Overview**

NRG's retail companies constantly seek opportunities to enhance people's lives by providing access to affordable, reliable, sustainable and modern energy solutions – tying directly to SDG #7 as described earlier. In 2017, we developed new ways to power people at home and on the go while delivering outstanding service to our 3 million retail customers. We also entered new territories, enabling us to serve more customers in key competitive markets. Here are some examples of how we help our customers save money and reduce their environmental footprint:

**Reliant**

Our Reliant brand serves residential and small business customers in the ERCOT (Texas) market. Several offerings introduced in 2017 provided new choices in support of efficient, sustainable energy usage.

**Reliant Speak & Save 24 Plan**

This new energy plan, featuring the Nest Thermostat E and Google Home, combines smart home technology with the ability to use voice commands to control energy usage. Reliant teamed with Nest and Google to create a plan designed to support the lifestyles and interests of customers. It brings voice-command technology to a solution that ushers them into an era of personal power in an easy-to-use fashion. In addition, the Nest Thermostat E also learns individual households' preferences and programs itself to reduce AC run times up to 15 percent.

**Reliant Electric Vehicle 12 Plan**

This plan was created specifically for the growing list of owners driving electric vehicles, designed to work with their daily electricity usage patterns. It provides a discounted energy charge at night, during the hours when they typically charge their vehicle for the next day's operation.

**NRG**

Our NRG brand serves residential and small business customers in the Northeast.

**NRG Renewable Plan**

For customers looking to support renewable energy, this new plan provides a "100% Wind" option at a fixed rate for six months. As an added incentive, after three months customers will receive a Goal Zero "Rock Out 2" Solar Speaker, reinforcing their commitment to renewable energy sources.

**Green Mountain Energy**

Our GME brand is the nation's longest serving company dedicated to providing 100% renewable energy to businesses and residents. Primarily leveraging wind and solar sources, GME brings cleaner, greener energy to customers in Texas and 11 other states. In 2017, GME electricity plans enabled business customers to avoid 900,000 pounds of CO<sub>2</sub> and residential customers to avoid 8.6 million pounds.

**Roof-top Solar**

Through its Solar Referral Program, GME delivered 330 roof-top solar systems, representing 3MW of capacity sold.

**Carbon conscious gas**

GME launched carbon conscious gas in six new markets in 2017. Through this program, ensured offsets are purchased from landfill gas capture sites. Efficiency is realized since methane capture is 12 times more beneficial to improving air quality than simply avoiding the burning of fossil fuels.

**Partnerships**

GME initiated several sustainability-related partnerships in 2017. These partners included TreeHouse (Dallas and Plano locations), Texas Parks & Wildlife (solar project selection), and the City of El Lago (EPA Green Power Community Designation).

**Sun Club**

This organizational partner supports renewable energy projects and, specifically, sustainability efforts such as energy efficiency improvements, education and resource conservation. Groups benefitting from awarded grants include The National Butterfly Center (Mission, TX), Wesley Community Center (Houston) and Overbrook School of the Blind (Philadelphia). These organizations are reducing their environmental impact by generating pollution-free electricity and freeing up more funds to support their core missions.

**Goal Zero**

The Goal Zero brand helps people power anything anywhere, from an outdoor adventurer to the everyday home owner. From phones to refrigerators, Goal Zero solar panels, rechargers and accessories give people the power to go farther, regardless of their gear's battery life.

**Yeti 3000 Lithium Portable Power Station**

This product provides a clean alternative to a gasoline-powered inverter generator.

**Boulder™ Solar Panels**

These panels are designed to allow hikers in remote locations to charge their gear – renewably and conveniently – day or night.

To read more about the extensive disaster relief efforts Goal Zero provided in 2017, see our [Lesson of Nature](#) section.



## Business Solutions Overview

The Business Solutions team makes sustainability a reality for organizations by developing unique energy solutions based on each customer's needs. These solutions include demand response, commodity sales, access to renewable energy, asset-backed distributed energy systems, energy efficiency measures and energy management services. Responding to the demand of ROI-driven companies, our projects span multiple industries and an equally diverse range of solutions. See a complete list of offerings [here](#).

### Access drives solutions

Our belief is that the best path to an optimal, sustainable energy solution starts with access to energy expertise and experience. For our business customers, this takes hold in a number of ways:

#### Consultative-based approach

Our experts work with businesses to help them capture the full power of sustainable energy, from idea to implementation. Their consultative approach is backed by an integrated platform of solutions as well as perspective that includes:

- **Foresight:** the ability to review each customer's portfolio, optimize existing systems and strategies, decipher market complexities and provide a roadmap of integrated energy solutions
- **Diligence:** the follow through to design sustainable energy goals and strategies, perform an integrated solutions option analysis and identify a sustainable energy action plan

#### Efficiency-based approach

We make energy efficiency a reality for businesses through a proven audit process designed to uncover specific improvement measures and actions. The audit is objective, thorough and becomes the foundation for an informed recommendation that can be:

- **Strategic:** a wide-ranging energy initiative resulting from an intensive review and engagement with each customer's business, overall energy approach and daily energy consumption
- **Tactical:** a recommendation that is quickly executed, provides clear ROI value and can become the foundation for a larger-scale energy approach to follow

#### Energy optimization-based approach

We are committed to providing customers with the most comprehensive energy usage consultation in the industry. This area's focus begins with in-depth load analysis and strategic energy supply review. That review leads to customized energy management strategies for each customer, including:

- **Electricity and Natural Gas Supply:** analysis, planning and contract structures create a sound and sustainable energy management plan
- **Demand-Side Management:** helping businesses reduce their energy usage during times of high demand creates a win-win result for customers and the grid
- **Distributed Energy Resources:** bringing resilient, measurable and sustainable value to customers through onsite, behind-the-meter solutions matched to their energy use



### Solution examples

Perhaps the best way to demonstrate our ability to deliver sustainable energy to businesses and communities is through the specific solutions we have recently put in place. Here are four examples:



#### Skybox Datacenters

When Skybox began developing a new data center, they were looking for a way to power it with a new level of efficiency, reliability and sustainability. To do that, the NRG Business Solutions team developed a multi-faceted energy solution that includes:

- **Solar:** photovoltaic panel on the outside parking canopy and berm provide enough capacity to power the center's office suite
- **Backup generation:** dual 2MW backup generators with 96-hour onsite fuel supply, operational in five seconds for an enhanced level of reliability
- **Demand response program:** reduces power needs on the grid during high-demand periods in exchange for financial incentives, bringing a revenue stream into the center's overall energy approach
- **Cooling efficiencies:** dual 400-ton chillers with Evaporcool® technology that provides a 30% efficiency increase, plus decreased electricity usage and maintenance
- **Electricity:** a 100% green (wind) power electricity contract that avoids 12.4M lbs. CO<sub>2</sub> annually and helps the datacenter reach its sustainability goals

#### Cisco

Cisco's sustainability vision has become a reality through our offsite solar solution – helping the company meet its 2017 sustainability goals to reduce GHG emissions by 40% and to use renewable energy for at least 25% of its power needs each year. The offsite nature of the solution was uniquely suited for both financial and logistical considerations. It leveraged the renewable power produced by the Blythe II solar project, located 550 miles away, to meet 10% of Cisco's electricity needs each year. The actual energy created by the facility powers the local grid while Cisco receives renewable energy credits (RECs) that go toward its sustainability goals.

#### Toshiba

Toshiba collaborated with us to deploy a new, cutting-edge battery energy storage system within the Texas (ERCOT) grid. The Elbow Creek Energy Storage project is a lithium-ion-based Toshiba battery system capable of storing and delivering up to 2 megawatts (MW) of electrical power. The system, located near the Elbow Creek Wind Farm in Howard County Texas, is designed for applications that enhance the stability of the electric grid. The project is expected to demonstrate the environmentally beneficial impact and commercial viability of siting energy storage technology amidst the growing hub of renewable generation in West Texas. The project was funded in part by the Texas Commission on Environmental Quality, as part of their Texas Emissions Reduction Plan.

#### Community Solar – Farmington, MN

Community Solar is an idea that took hold in 2017 at several locations in three states: New York, Massachusetts and Minnesota. At the Farmington, MN location, in addition to bringing a renewable solution to businesses and homes who may have thought their location precluded them from considering solar, another environment benefit has also taken hold. Here, native flowers and meadow grasses have become an abundant habitat for pollinators – the bees and other insects that move pollen between flowering plants. To make it happen, NRG planted pollinator-friendly seed mixes in the land under and around the solar farm and also contracted with a local firm to jumpstart the growth of the plants by installing mature plants as well. From here, bee hives for honey production (apiaries) have co-located on the site producing an end product known as "solar honey." All in all, it represents a sustainable success story on many levels. In terms of the solar installation itself and the renewable energy generated, the Farmington facility is comprised of nearly 20,000 solar panels and has 191 residential customers enrolled along with two commercial subscribers. To date, the farm has produced more than 1M kWh of clean, renewable energy. The site is one of 10 community solar installations NRG has put in place in Minnesota alone. Among the well-known corporate subscribers are U.S. Bank, Ecolab, Macy's and Land O'Lakes. ✚

# LESSON OF NATURE. HURRICANE HARVEY'S IMPACT.

## Harvey Relief at a glance



Engage with First Responders & Community to provide portable power -

24 NRG Go kiosks and 10,000+ Goal Zero products



First retailer

to provide customer relief including ceasing disconnects and providing payment extensions



1,500 volunteer hours



50+ hours

of Services by Reliant trucks



200+

employee volunteers

**In 2017, it became painfully evident that climate change isn't just coming, it's already here. People and communities all over the world were reminded in the most brutal ways that the forces of nature, though necessary to life on Earth, can also be devastating. Multiple hurricanes of unprecedented power, earthquakes, fires and mudslides and other devastating events created chaos and crisis all over the world. However, times of crisis can be when the most inspiring human moments arise – when humanity shines brightest.**

In August, Harvey, a category 4 hurricane, devastated the eastern coast of Texas and southern Louisiana where NRG has significant physical operations and thousands of employees. As the storm unfolded, it became clear that the warnings from local officials were coming true. Rain was delivered in feet, not inches; bayous and retention ponds were breached or threatening to fail. Local authorities became overwhelmed and entire communities along the Gulf were struggling to cope. Even though our business continuity plan was deployed well in advance of the storm, the scale and scope of Harvey demanded real-time improvising and inspired our employees to step up and demonstrate exemplary leadership.

## Nature's story was also a people story

Even as some battled leaks and flooding in their own homes, our people worked remotely or traveled to where they were safe to work, to ensure business continuity – some of them moving furniture and valued belongings out of harm's way between conference calls. Some employees were deployed out of town altogether to ensure that payroll and other employee support services were not interrupted by the storm's impact. Many of our employees rescued others by car and boat – and helped to muck-out the homes of their colleagues to set them on the road to recovery. Beyond the financial and in-kind support NRG offered, hundreds of employees from around the country donated cash and goods to assist their affected colleagues and communities to support the work of many relief organizations. Cash donations

to qualified organizations were triple-matched by NRG's PositiveNRG corporate philanthropy program.

Within days of the storm making landfall, our Reliant customer care center implemented a policy of no disconnects and no late fees so our customers could focus on what was important – their safety. Our emergency response team kept track of every employee and their reported impacts during the storm, and set up a 24/7 hotline to ensure that employees could talk directly to an NRG colleague for help if they needed assistance.

Our people came together to help in many ways and from many locations – whether at our offices in downtown Houston, at NRG Center which hosted evacuees, at a command center in Rockport, TX or at several generation plants. In all these places, we came together to support our communities and employees who were impacted.



### Resilience of our generation fleet

The Texas grid held up remarkably well during the storm. Even though ~300,000 customers were without power at the worst of the storm, most came back online fairly quickly – a testament of the lessons learned and improvements made after Hurricanes Allison and Ike. We were well prepared in our operations. Still, visits to our W.A. Parish, San Jacinto and Cedar Bayou facilities were eye-opening in many ways. In each case, it was humbling to see evidence of the torrential rain and rising floodwaters.

The team at W.A. Parish – when faced with wet coal and flood conditions – successfully transitioned units 5 & 6 from coal to gas, and in real time, to keep the system running and power generation uninterrupted.

Our San Jacinto team was locked in at their facility for four full days – including a brief shelter-in-place event when a neighboring facility sprung a small ammonia leak. The team kept required steam flowing to a customer – a DuPont facility located next door – for as long as they needed it to keep their own operations running.

Our team at Cedar Bayou was also in place for four full days – remaining in reserve and ready throughout the historic storm. Team members protected the facility and the site – even as their personal homes were flooding and their families were being evacuated to safety.

Similarly, the South Texas Nuclear plant remained online throughout the storm\*. Thanks to the teams at these and other locations in the path of the storm – NRG performed admirably to ensure our communities had power – an extraordinary effort during extraordinary conditions.

### The recovery mission

The NRG/Reliant team spent several weeks with outreach activities from Rockport to Houston and surrounding areas providing portable power and a helping hand where needed. This included over \$2M in financial and in-kind donations in addition to the customer relief efforts. Nearly two weeks after the storm hit, electricity service was just being restored in many parts of these communities.

To help residents recover in those hard-hit areas, our Power2Serve vehicle and team was deployed. This fully staffed, 26-foot-long truck is equipped with 40kW of diesel and solar electric generators and is designed to become an on-location, climate-controlled pavilion. It quickly became a go-to public resource in Rockport, Texas utilized by citizens to charge electronics, get updates and access Wi-Fi. Goal Zero battery packs and lights were also supplied to first responders and people in need. We also partnered with other organizations

\* South Texas Nuclear Project is a nuclear generating facility located near Bay City, Texas in which NRG owns a 44% interest



like Team Rubicon and the Information Technology Disaster Resource Center to bring support to the community.

### Beyond Harvey – what a storm can tell us

Harvey was an exceptional storm from whose devastation inspiring moments and longer-term lessons emerged. It was a reminder in this day and age of the value and necessity of resiliency and the need for energy companies like ours to make not just our operations, but our suppliers and our customers – both residential and business – more resilient and, indeed, more sustainable. Achieving this will not only be a human success story, it will also represent a business success story. Power is the enabler of people's lives and of the economy. For us, as an energy company, that idea was brought home in the days and months after Harvey. Customers who are forced out of their homes and businesses who are forced to shut down

are not buying power. The economic costs of storm-related power outages, while not as immediate as the human costs of a storm, are significant nonetheless. If Harvey provided a raw and firsthand look at what extreme weather events may look like in the years to come, then it also provided a meaningful message as to what needs to be done in response by communities and businesses. Not just mitigation like our science-based targets to reduce greenhouse gas emissions in line with climate science, but adaptation as well. Becoming more resilient and more adaptable has become a necessity and competes for capital. Looking ahead, our company and our people have another opportunity – a longer-term one – to be equally heroic as we develop real-world solutions to address the real-world impact of the potential for more frequent climate-related events. +





## SUSTAINABLE SUPPLIERS

**In today's global economy, virtually no organization is fully vertically integrated. This makes sustainability relevant across a company's entire value chain. After setting an ambitious goal addressing downstream avoidance of customer greenhouse gas emissions, NRG is one of the first in its sector to include its supply chain as part of its sustainability commitments. This makes strong business sense because sustainable supply chains are inherently more efficient, transparent and resilient.**

Organizations in other sectors that engaged their suppliers on sustainability invariably generated cost savings in the process. Our customers are extending their sustainability commitments to suppliers like us, and sectors are developing standards and frameworks for the sourcing and distribution of their products. Supply chain management and transparency is increasingly integral to business and sustainability strategy. Driving enhanced disclosures and accountability in our supply chain will help us reduce costs, mitigate risk, ensure business success and safeguard our reputation.

### Goals and Performance

Last year, we announced three new sustainability goals for our supply chain in the areas of disclosure, impact reduction and responsible sourcing principles. We also established a multi-year strategy that focused on planning, implementation and continuous improvement over time. Our focus on planning in 2017 has revealed our largest supply chain impacts and opportunities, establishing a strategic foundation from which to drive significant progress going forward.

The bulk of our company's supplier spend goes to fuels, goods and services required to operate and maintain our generation fleet, engineering and construction services, and administrative items. Our company does not have significant ownership positions in fossil fuel production or infrastructure, but we recognize the importance of engaging suppliers in these areas. Taken together, NRG's supply chain efforts involving data disclosure, footprinting, risk assessment, and industry-wide action have formed a foundation from which to build on in 2018 and beyond. These efforts are supplementing our existing supply chain management activities.

### Goal 1: Achieve GHG and water disclosures – from 80 percent of major suppliers by 2020

NRG has long participated in CDP's Climate Change and Water Risk programs, voluntarily disclosing environmental information sought by investors. In 2017, we broadened our reporting efforts by becoming the first U.S. power producer to participate in the CDP Supply Chain Program. As part of this initiative, we encouraged more than 300 suppliers representing 90% of supply chain spend to disclose information about their climate change and water performance. We received climate change responses from 34% of requested suppliers and water responses from 22% of requested suppliers. We feel this first year's effort puts us in great position to deliver on our 2020 disclosure target.

In our first year of participation, we earned an A-rating from CDP and a position on the Supplier Engagement Rating leader board. This leader board comprises companies from around the world that have been specifically recognized for their efforts to manage carbon emissions and address climate-related issues across their supply chains. Of the companies that participated in CDP's supply chain program in 2017, NRG was among the 2% of companies in the U.S. awarded a place on the leader board and one of only two power producers.



By encouraging disclosure through CDP, NRG gained more insight into the environmental and social impact of its purchasing decisions. The process also encouraged NRG's suppliers to improve sustainability data disclosure in competing for NRG's business.

## Goals and performance

Our Sustainable Suppliers goals are to:



80%

Achieve GHG and water disclosures from 80 percent of major suppliers by 2020



↓ 25%

Reduce supply chain carbon and water intensity 25 percent by 2025



Develop and implement NRG responsible sourcing principles

### Goal 2: Reduce supply chain carbon and water intensity 25 percent by 2025

To achieve our carbon and water reduction targets, we partnered with third-party experts to determine our existing supply chain footprint and key impact areas. These analyses have laid a foundation that will enable us to prioritize our efforts in 2018.

#### Carbon and Water Footprint

In 2017, we worked with a third-party to calculate our supply chain carbon and water baseline. While we have calculated the carbon and water footprint of our direct operations for a number of years, we needed a baseline for our supply chain that could be used to measure progress toward our 25% reduction target.

The analysis revealed our largest impact areas per dollar of spend, which will enable us to craft strategies that address our most significant areas of impact (See figure 2). It also revealed individual vendors that comprise the largest portion of our supply chain footprint. We will look to engage these critical suppliers and partner on strategies that address carbon and water over the coming years.

#### Supply Chain Sustainability Materiality<sup>33</sup> Assessment

We worked with a third party to identify supply chain risks across nine social and environmental categories (See figure 3). Through research, benchmarking, and employee and supplier interviews, they helped us determine our company's strengths, weaknesses, and opportunities to improve performance.

The study revealed NRG to be a top performer in supply chain sustainability among independent power producers, along with some additional steps we could take to further solidify our leadership position. The analysis confirmed our assumption that we should focus on addressing methane leakage in the natural gas supply chain given the growing importance of this fuel to NRG and the U.S. energy system.

<sup>33</sup> NRG uses the term 'materiality' to pertain only to sustainability issues in this context, not materiality as defined by the SEC. For NRG's voluntary reporting protocol, the term 'Key Issues Assessment' is used in the place of 'materiality assessment'. (See page 28)

Figure 2: Supply chain spend and environmental impact areas

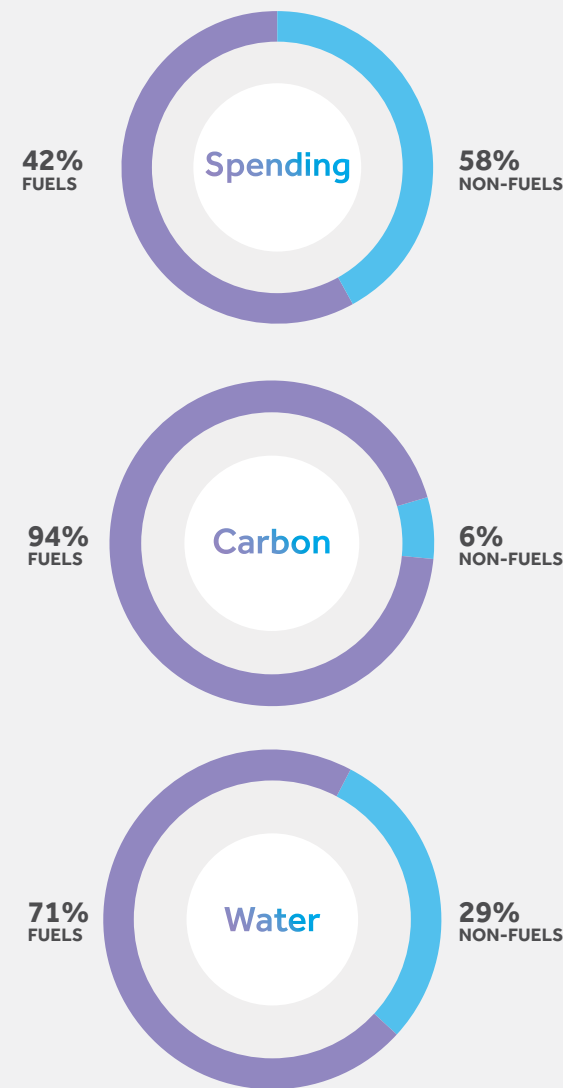


Figure 3: Key supply chain social and environmental risks

#### SOCIAL RISKS

- Employment/labor risk
- Local communities/reputation risk
- Occupational health and safety risk
- Compliance risk

#### ENVIRONMENTAL RISKS

- Pollution (effluents and waste)
- GHG and energy intensity
- Exposure to climate change/extreme weather
- Water supply risk
- Land use and biodiversity risk

### Goal 3: Develop and implement NRG responsible sourcing principles

In 2017, we engaged stakeholders and analyzed best practices for responsible sourcing within the energy sector and the broader economy. Companies in sectors as diverse as electronics, food, cosmetics, apparel, precious metals and many others have come together as a group to encourage data disclosure and performance improvement among suppliers. Our research is informing what new responsible sourcing principles can supplement our existing supplier code of conduct and is also intended to yield actionable insights across our sector.

As highlighted in our research, natural gas is a key focus area in our supply chain. Natural gas is an increasingly important fuel to keep power affordable and to add flexible fast-start capacity that allows faster scaling of renewables on the grid. To encourage responsible natural gas production, NRG joined with 8 companies that comprise 12% of the market for delivered gas in the U.S. as part of the Natural Gas Supply Collaborative. After months of detailed work, the Collaborative issued a report in October 2017 entitled "**Environmental and Social Performance Indicators for Natural Gas Production**" calling on natural gas producers to disclose information related to methane and air emissions, water, chemicals and community health and safety (see Figure 4).

Regulators and civil society groups have been engaging natural gas producers for years, but the Collaborative is the

first example of major corporate consumers articulating their sustainability priorities as a group. NRG is continuing to engage with the Collaborative to further incentivize production practices that minimize negative environmental and social impact. +

Figure 4: Natural Gas Supply Collaborative Key Sustainability Performance Indicators for Natural Gas Production

Topic Area		Performance Indicators	
		Quantitative	Management Strategy
01	Methane and Air Emissions	Methane Emissions (Total and Intensity)	Overall Methane Strategy
02	Water	Water Use (Total and Freshwater Intensity) Water Testing Spill Reporting	Freshwater Use Strategy Well Planning and Integrity Strategy Wastewater Management Strategy
03	Chemical Use	Chemical Stewardship	Chemical Management Strategy
04	Community and Safety	Measuring Community Engagement Safety Incident Rates	Community Engagement Strategy Contractor Performance Strategy

As a founding member of the Natural Gas Supply Collaborative, NRG has demonstrated leadership consistent with its commitment to sustainability throughout its supply chain. Teaming up with other major natural gas purchasers, NRG reinforces the importance of transparency in upstream operations. Going forward, NRG and other members of the Collaborative are committed to promoting safe and responsible practices for natural gas supply.

-MICHAEL J. BRADLEY, PRESIDENT & FOUNDER, M. J. BRADLEY & ASSOCIATES



## Management

Safety comes first in our supply chain management approach. All suppliers providing on-site services must be prescreened for safety through our supplier registration portal. That is the first step in doing business with NRG, and failure to meet our safety standards can result in disqualification. Other factors considered when evaluating a supplier's fit for NRG include but are not limited to diversity certification/registration, audited financial statements, Dun & Bradstreet business credit reports, performance, quality programs and insurance. Access the supplier portal [here](#).

Additionally, the NRG Standard Terms and Conditions and Supplier Code of Conduct govern the relationship between NRG and our suppliers. We have the ability to terminate contracts and relations with suppliers under these Standard Terms and Conditions should we view the performance of the supplier as unacceptable or outside of the agreed-upon performance delineated in the Standard Terms and Conditions and/or the Supplier Code of Conduct. Both documents can be found [here](#). These policies apply to all suppliers and were last updated in May 2015 (Standard Terms and Conditions) and June 2014 (Supplier Code of Conduct). Our Operational Excellence team within the supply chain is responsible for a yearly review of policies in conjunction with a committee consisting of supply chain management.

All our suppliers must also adhere to our STRIVE values, which are detailed in the Supplier Code of Conduct. These values are a longstanding philosophy at NRG, and we expect employees and suppliers alike to follow them. Find our STRIVE values [here](#). ✦

## Supplier selection

Supplier selection is a multilayered process. We first identify suppliers through various methods, including but not limited to, existing relationships, referrals, matchmaking events, trade shows and conferences. As part of this effort, our supply chain diversity coordinator leads a program dedicated to identifying small and women-owned businesses to partner with us across all functional groups. Suppliers are required to register in our third-party supplier management portal, and suppliers providing on-site services are evaluated for safety. Failure to meet applicable safety requirements will result in disqualification or conditional qualification, which requires additional documentation and an improvement plan. Suppliers of environmental services, such as handling of hazardous or non-hazardous waste, are audited to determine eligibility. Suppliers are also required to submit certificates of insurance to ensure compliance with our minimum insurance requirements.

Although suppliers must successfully submit their profiles and complete the evaluation process to perform services at NRG, the evaluation process may be conducted before, after or simultaneous to a bid event. Bid events are generally required for purchases greater than \$50,000. Suppliers are provided a timeline and asked to submit a detailed proposal based on the statement of work or requirements provided by NRG. These bid events are managed within a third-party portal through a top supplier to the utility industry. In addition to managing bid events, the portal provides spend analysis based on historic NRG supply chain data and cost analysis based on market data. A bid event may last days, weeks or months depending on the complexity of the product or service being sourced. The events are managed by supply chain professionals who work with departmental or operational subject-matter experts to select suppliers based on various factors, including but not limited to quality, reputation, proposal, price, environmental, social, and governance (ESG) objectives, time restrictions and scarcity of product/service.

Once a supplier is selected, they are engaged throughout the completion of the project awarded or the services/materials to be delivered. Sourcing specialists are responsible for maintaining relationships with suppliers within their assigned categories or plant location. ✦

## Strategic sourcing

In addition to general bid events, our strategic sourcing team is responsible for identifying opportunities for strategic agreements across our fleet of generation stations. We invite national and regional suppliers to participate in strategic bid events that result in long-term contracts (2-3 years) for national or regional services to our fleet. Strategic suppliers are assigned to category managers on our strategic sourcing team. The category managers are responsible for scheduling quarterly or biannual business reviews to discuss various topics, including but not limited to safety, value creation, ESG initiatives, market outlook, Key Performance Indicator (KPI) performance, spend and areas for improvement.

To achieve economies of scale in our purchasing, we will enter into contracts with national suppliers that provide miscellaneous office and administrative goods and services (e.g., travel-related products, office supplies, IT software or hardware). Due to the nature of our business, specialized goods and services to operate and maintain NRG generation assets are obtained from a limited number of domestic and international manufacturers. Under certain circumstances, we may elect to use a local sourcing strategy rather than a regional/national approach. We have a supplier diversity program that works to achieve established goals with the Small Business Administration for the utilization of diverse businesses across a variety of different categories, including but not limited to women, minority, veteran and Historically Underutilized Business Zones (HUBZones).

In addition to leveraging spend, strategic sourcing allows us to guard against the threat of a shortage of skilled labor. We mitigate this risk through long-term contracts and strong supplier relationships. Pre-negotiated terms allow for better lead times, and suppliers are motivated to devote resources to NRG by knowing we are a committed strategic partner. Several of our strategic suppliers consider NRG a key account, thereby increasing the likelihood that our needs will be met. ✦

## Standards and policies

The NRG Standard Terms and Conditions require that suppliers comply with all applicable laws and regulations. The Standard Terms and Conditions can be found [here](#).

We conduct audits of all treatment, storage and disposal (TSD) facilities where our hazardous, industrial and universal waste streams are disposed. We work closely with our waste suppliers to identify and audit their TSD facilities before commencing services. The focus of the audit is primarily to ensure that both the supplier and TSD facility are compliant with all applicable laws and regulations. We have strategic relationships with a limited number of waste suppliers whose TSD facilities are audited every five years to maintain compliance. Because of the environmental sensitivity of waste hauling, we maintain strategic relationships with key waste suppliers and do not regularly add new waste suppliers to our supply chain.

Most high-volume materials are purchased by various units of measure with no direct correlation to weight or volume. With the exception of 26 miles of transmission from our wind farms, NRG does not own or operate distribution. Materials used in the generation of electricity include fuel, chemicals for wastewater treatment and air quality control equipment and maintenance. We have a chemical management plan in place that covers reviewing all chemicals before they can be used on-site; managing the handling and delivery of chemicals to ensure best practices and avoid the need for disposing of chemicals past their shelf lives; secondary containment; and emergency response. Any transformers or PCB-containing equipment on our property were converted to non-PCB materials a number of years ago. ✚

## Conflict minerals

In September 2014, NRG 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 conducted an analysis of 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 and are referred to as 3TGs.

Goal Zero's supply contracts require suppliers to represent and ensure that they supply Goal Zero with only 3TGs that are "conflict free" unless otherwise agreed to by Goal Zero. Goal Zero also requires that its suppliers agree that they will inform all of their own suppliers of this policy and ensure that it is complied with throughout the supply chain. Goal Zero reserves the right, in its contracts, to audit its suppliers' compliance at any time and to terminate supply agreements if there is a material breach of the agreement.

In addition, in May 2016, NRG adopted manufacturing standards with which all Goal Zero suppliers will be required to comply. The standards address compliance with laws and regulations and require suppliers to abide by the applicable laws and regulations of the country in which they do business, including, but not limited to, laws related to labor practices, health and safety, environmental responsibility and anti-corruption. The standards also set requirements based on industry best practices and international conventions, including those related to 3TGs.

Goal Zero does not directly manufacture any products and instead contracts for the manufacture and assembly of its products through a competitive global supply process. The suppliers then source both raw materials and purchased parts. Goal Zero has 16 direct material suppliers globally, and there are generally multiple tiers between the 3TG mines and Goal Zero's direct suppliers. Therefore, we rely on the direct suppliers to provide information on the origin of the 3TGs contained in components and materials supplied to Goal Zero, including sources of 3TGs that are supplied to them from lower-tier suppliers. Contracts with Goal Zero's suppliers are frequently in force for multiple years, and we can't always unilaterally impose new contract terms and flow-down requirements. As we enter into new contracts, we require Goal Zero's suppliers to provide information about the presence of conflict minerals in the products supplied and about the smelter sources of any conflict minerals. Read the full SD report submitted to the SEC [here](#). ✚





# SUSTAINABLE OPERATIONS

**Sustainable Operations is one of the dimensions of our business strategy focused on improving environmental and community outcomes from activities at NRG’s generating assets. We are working to improve efficiency and reduce emissions from generation assets, and in the process, reducing our water use and waste generation to ensure productivity and value for our stakeholders. Sustainable Operations include safety, greenhouse gas (GHG) emissions and carbon capture, utilization and storage, other air emissions, water, by-products and biodiversity.**

As we safely provide cleaner power, we improve the impacts of our operations on our workers, communities and the environment. Additionally, we create opportunities to reduce our reliance on water to cool our plants and optimize the handling of the by-products those plants produce. This helps us realize cost savings while improving the ecosystems where we operate.

We aim to be an environmental leader in our industry, and work to minimize the negative impacts of conventional generation by investing in environmental controls, repowering our fleet with lower carbon fuels and meeting or surpassing emissions requirements.

Our GHG-reduction goals reflect our commitment to reducing the negative impacts of electricity generation from fossil fuels on communities and the environment. In addition to improvements made at our conventional

power plants, safely providing cleaner power also means supporting the rise of intermittent renewable energy resources with flexible, fast-ramping natural gas plants as well as battery storage and offering customers controllable demand solutions.

### Conventional generation

An important part of NRG’s business is wholesale power generation, and we have one of the largest power generation portfolios in the U.S., with approximately 28,000 MW of fossil fuel and nuclear generation capacity at 51 plants as of Dec. 31, 2017.

Additionally, less than 25 percent of our consolidated operating revenues were derived from coal-fired operating assets.

### Renewables

As described previously, NRG expects to complete the sale of its Renewables operating and development platform and its full ownership interest in NRG Yield, Inc. in the second half of 2018. Until this happens, they remain part of NRG. The following description reflects the historical view of these businesses as a part of NRG’s business strategy through its announcement of the Transformation Plan in 2017.

During 2017, the business continued to acquire, develop, operate and maintain a portfolio of utility-scale wind and solar, community solar and distributed solar generation assets. The business also managed and operated NRG Yield’s renewable assets and developed, constructed and financed solutions for utilities, schools, municipalities and commercial market segments in 2017.

In 2017, we acquired 209 MW of utility-scale solar and wind projects and 82 MW of distributed generation and community solar projects currently under development or in operation in 3 states. Apart from assets in operation, as of December 31, 2017, we held a backlog of in-construction, contracted and awarded projects of 1,500 MW, and a pipeline of 5,742 MW across the utility, community solar and distributed solar renewables markets.

## Goals and performance

Our Sustainable Operations goals are:



**Achieve top-decile safety performance<sup>35</sup>**



**↓90%**

**Reduce GHG emissions 50 percent by 2030 and 90 percent by 2050 (from a 2014 baseline)<sup>36</sup>**



**↓40%**

**Reduce water use 40 percent by 2030 (from a 2014 baseline)<sup>37</sup>**



**↑30%**

**Increase recycling rate of coal combustion residuals 30 percent by 2022 (from a 2016 baseline)<sup>38</sup>**

<sup>35</sup> Metrics used are Occupational Safety and Health Administration (OSHA) recordable injuries, and top decile is determined by our industry average.

<sup>36</sup> This includes scope 1 and 2 and some scope 3 emissions.

<sup>37</sup> Water use is defined as water withdrawal by our power-generation assets for the purpose of electricity production and consumption of potable and municipal water at our offices and small plants.

<sup>38</sup> Coal combustion residuals include a number of byproducts produced from burning coal for electricity, including fly ash and bottom ash.



## Safety

“Safety first” is our number-one core value. Our goal is to achieve top-decile performance for Occupational Safety and Health Administration (OSHA) recordable injuries (top decile means top ten percent in the industry) with the ultimate goal of a zero-injury record every year. The continuous improvement and implementation of our preventive safety practices and programs keeps our employees safe and productive at work. In 2017, we honored our safety commitment to stay well below the industry average incident rate by registering our second-best year-end incident rate at .57, expected to be well within top decile once that data becomes available.

### Star performance

We showcased our commitment with 8 NRG fleet facilities maintaining their OSHA Voluntary Protection Program (VPP) Star status – the highest possible level of recognition – in 2017:

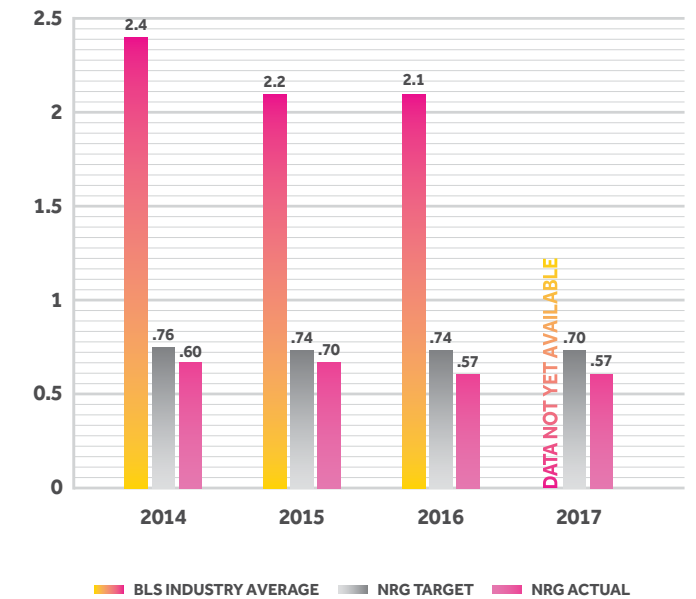
- Big Cajun II
- Cedar Bayou
- Central Repair Shop
- Cabrillo I (Encina)
- Greens Bayou
- San Jacinto
- TH Wharton
- WA Parish

The VPP Star program recognizes the exceptional occupational health and safety achievements of employers and employees through an application review and in-depth, on-site evaluation by a team of OSHA experts.

### 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 they meet all safety expectations. Just like employees, we require contractors to report all observed hazards and incidents. We believe the value of reporting and investigating all incidents outweighs simply tracking lost-time injury rates. ✚

NRG INDUSTRY  
Recordable incident rates\*



Plants with zero recordables in 2017 included

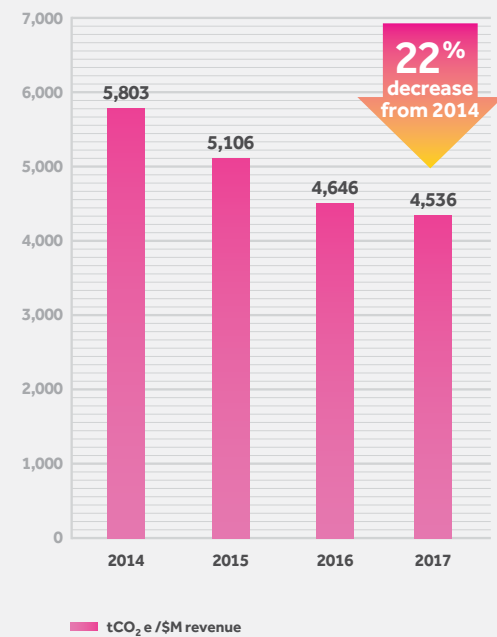
- Astoria
- Bayou Cove
- Big Cajun I
- CT Jets
- Cottonwood
- Devon
- Encina
- Greens Bayou
- Gregory
- Ivanpah
- Joliet
- Marsh Landing
- Middletown
- Midway-Sunset
- Montville
- Saguaro
- Sterlington
- Sunrise
- Vienna
- Walnut Creek
- Will County

## GHG emissions

NRG continues to monitor its environmental impact as we pursue a more sustainable energy future. We emit CO<sub>2</sub> when generating electricity at most of our facilities. We anticipate reductions in our future emissions profile as we modernize our fleet. The way we participate in the market is evolving in ways that allow us to provide vital reliability and services to the grid while running less often, thereby significantly reducing absolute emissions.

From 2016 to 2017, our CO<sub>2</sub>e scope 1 emissions from generation decreased from 49 million metric tons to approximately 48 million metric tons, a 2 percent reduction. The major factor leading to the decreased emissions was a reduction in fleet wide annual net generation due to a continued market-driven shift towards increased generation from natural gas over coal due to the relatively inexpensive price of natural gas.

NRG's Revenue Carbon Intensity



## Carbon emission goals

We are committed to doing our part to reduce our carbon emissions while growing our business and facilitating progress toward a sustainable energy future. In 2015, NRG became one of the first 10 companies to have their carbon emission reduction targets approved by the Science Based Targets initiative, a joint effort of CDP, the World Resources Institute, the World Wildlife Fund and the U.N. Global Compact. The initiative works with companies and approves only corporate targets that meet its strict criteria. In March 2017, we were recognized for Excellence in Greenhouse Gas Management (Goal Setting) by the EPA's Climate Leadership Awards. In November 2014, we set industry-leading greenhouse gas reduction goals and announced a goal to cut CO<sub>2</sub> and CO<sub>2</sub>e equivalent emissions 50 percent by 2030 and 90 percent by 2050 from a 2014 baseline. This goal includes scope 1, 2, and

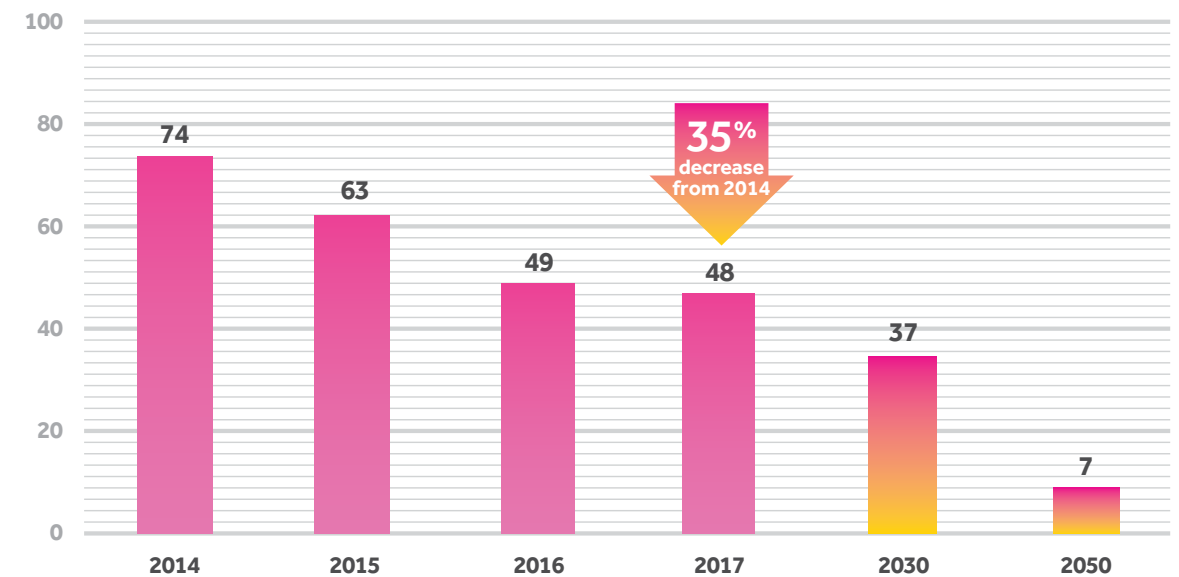
3 emissions. For more detail, see our [third-party assurance statement](#). The chart below shows a 35%<sup>40</sup> reduction from a 2014 baseline, more than two-thirds of the way to our 2030 science-based target.

As absolute goals, these targets can only be met by reducing the carbon emitted by our conventional power generation assets – not by diluting our carbon profile through adding low-carbon assets like renewable generation and storage solutions. As previously mentioned, meeting these goals was never going to be met by adding renewables to our portfolio, but rather by focusing on decarbonizing our conventional generation fleet. Progress to date has been made through fuel switchings and changes in the generation profile of some assets. In the future, as NRG's generation portfolio continues to rebalance and as business operations shift, additional or alternative goals may be considered.



## 70% of the way to our 2030 goal

Tracking toward our carbon emission goals  
(NRG U.S. CO<sub>2</sub>e emissions scope 1, 2, & 3\*)  
tCO<sub>2</sub>e



<sup>40</sup> 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.

### Carbon asset risks

Climate change is a significant challenge, and we are working to be part of the solution. We believe future energy production can be both low carbon and low cost, and we are committed to making this vision a reality. We are committed to Sustainable Development Goals 7 and 13:

- **Goal 7:** Ensure access to affordable, reliable, sustainable and modern energy for all
- **Goal 13:** Take urgent action to combat climate change and its impacts

NRG's businesses are subject to physical, market and economic risks relating to potential effects of climate change. Human-produced GHG emissions produce changes in weather and other environmental conditions, including temperature and precipitation levels, and thus may affect consumer demand for electricity. In addition, the potential physical effects of climate change, such as increased frequency and severity of storms, floods and other climatic events, could disrupt NRG's operations and supply chain, and cause us to incur significant costs in preparing for or responding to these effects. These or other meteorological changes could lead to increased operating costs, capital expenses or power purchase costs. NRG's commercial and residential customers may also experience the potential physical impacts of climate change and may incur significant costs in preparing for or responding to these efforts, including increasing the mix and resiliency of their energy solutions and supply.

GHG regulation could increase the cost of electricity generated by fossil fuels, and such increases could reduce demand for the power NRG generates and markets. Also, demand for NRG's energy-related services could be similarly impacted by consumers' preferences or market factors favoring energy efficiency, low-carbon power sources or reduced electricity usage.

Between 2014 and 2017, our CO<sub>2</sub>e emissions decreased 35% percent. That puts us well on track to achieve our goal of a 50-percent reduction by 2030.

### Federal energy and environmental regulation

The energy sector accounts for approximately one-third of carbon emissions in the United States. That is why NRG supports competitive changes to retail and wholesale markets that make it easier to drive sustainable outcomes and save money for consumers. Because oversight of the electric industry is split between federal and state regulators, the best solutions involve cooperation between both sets of regulators to craft regulations that drive market-based sustainable outcomes.

For example, all of our Retail businesses offer zero-emission or low-emission retail rate plans. All of our retail offerings are regulated by the appropriate State entity. However, those plans are only available to customers in parts of the country that allow retail choice, largely Texas, the mid-Atlantic states, and states in the Northeast. Action at the State level is necessary in other parts of the country to allow customers to expand retail choice. That is one of the reasons why NRG supports a national "Consumer Bill of Rights," which includes the right of all Americans to "shop green," either by generating power themselves or buying green power from a retail electric provider of their choice.



NRG's fleet of utility-scale power plants is also heavily regulated by federal regulators. For example, most of NRG's power plants sell their output into regional electricity markets under rules set by the Federal Energy Regulatory Commission (FERC). While some regional energy markets address sustainability needs by putting a price on carbon (such as AB 32 in California or the Regional Greenhouse Gas Initiative (RGGI) in the Eastern United States), many struggle to price environmental externalities into the wholesale price of electricity. That is why NRG is engaged with stakeholders in reviewing innovative market designs that price carbon or allow for the procurement of low-carbon power, as part of a competitive process. Learn more about NRG's policy and regulatory engagement at [Policy Engagement](#).

As mentioned in **Sustainability Context**, decarbonizing the energy industry requires massive change, and the role of competitive markets is essential. Policy incentives help make new technologies get to commercial scale faster, but supportive market structures are necessary to ensure success beyond incentives. Direct retail access to renewable energy improves market transparency, drives innovation and investment in renewable infrastructure, and supports the

expansion of renewable energy to the general public. Business consumers can help by advocating for policies that support competitive power markets.

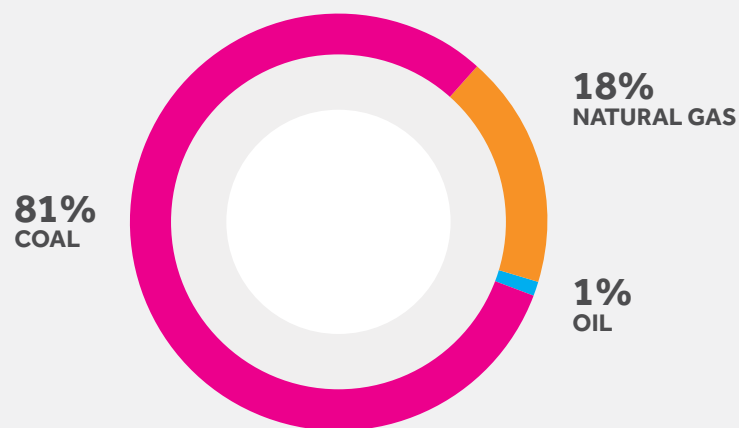
### Petra Nova

Petra Nova is the world's largest post-combustion carbon capture facility, located at our WA Parish Generating Station southwest of Houston. Since late 2016, the project has combined carbon capture with enhanced oil recovery (EOR) to increase domestic oil supply while decreasing the amount of CO<sub>2</sub> released into the atmosphere.

The Petra Nova project captures more than 90 percent of the CO<sub>2</sub> from a 240-megawatt equivalent slipstream of flue gas. The project can capture more than 5,000 tons of CO<sub>2</sub> per day, and in 2017, the system sequestered more than 1.25 million tons of CO<sub>2</sub>.

An 80-mile pipeline safely transports the captured CO<sub>2</sub> through Fort Bend, Wharton and Jackson counties to the West Ranch oil field. Through EOR, oil production at West Ranch averages more than 5,000 barrels per day from around 300 barrels a day before we began EOR operations. For more information, please visit [Petra Nova](#). ✦

GHG emissions by fuel type





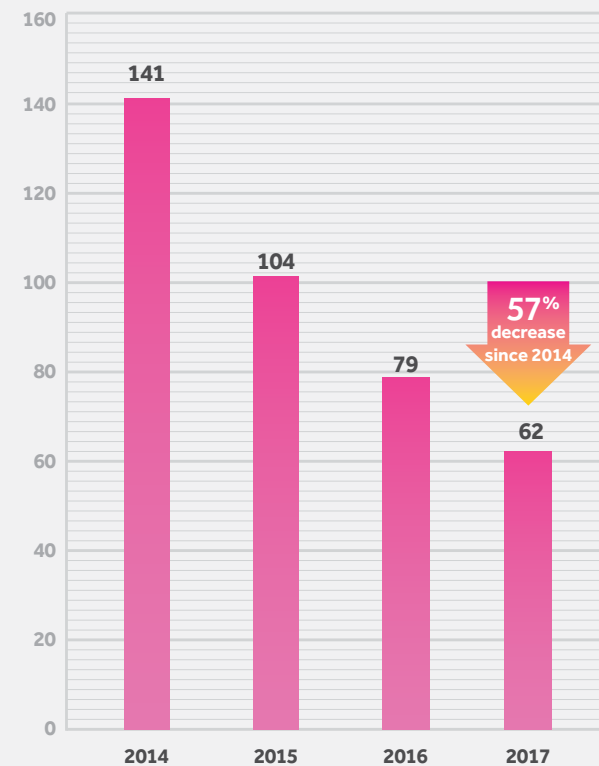


## Other air emissions

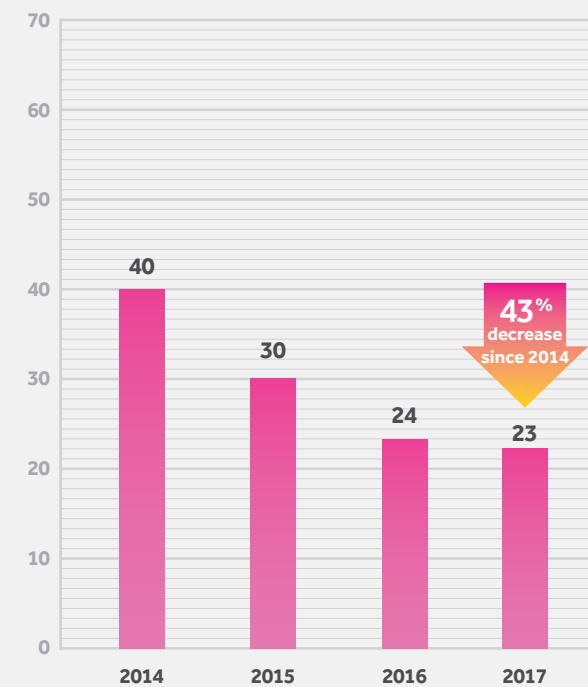
The charts below include emissions from NRG owned and operated generating stations. Our SO<sub>x</sub> and NO<sub>x</sub> emissions declined 22 percent and 4 percent, respectively from 2016. Factors leading to the decreases include reductions in fleet-wide annual net generation and improved environmental controls.

In 2017, our mercury emissions decreased 25 percent from 2016. The reduction was driven by the installation of emissions controls on coal units and a decrease in coal-fired generation due to market conditions and fuel-switching projects. ✦

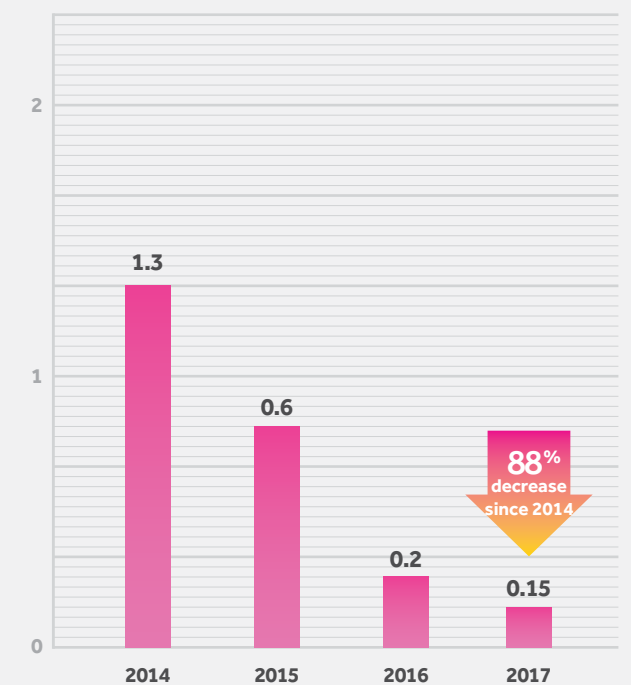
(EMISSIONS MILLION KILOGRAMS)  
NRG Annual U.S. SO<sub>x</sub> emissions



(EMISSIONS MILLION KILOGRAMS)  
NRG Annual U.S. NO<sub>x</sub> emissions



(EMISSIONS U.S. TONS)  
NRG Annual U.S. mercury emissions\*



\* Mercury emissions are estimated based on prior year for four facilities due to incomplete data at time of publication.

## Water

Water availability and quality are important to our operations, the communities in which we operate, and the environment. Operating some of our power generation facilities depends on sufficient amounts of available fresh, recycled, brackish and ocean water. The primary direct use of this water is the cooling of condensers during power generation. Small amounts of fresh water are used for steam creation and employee water, sanitation and hygiene.

We have designed our approach to water management with the understanding that water issues (usage, scarcity, quality and biodiversity) are site specific. In some regions, drought or flood conditions can threaten electricity production. In others, fresh water is readily available. 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 non-potable water such as brackish ocean water or grey water from sewage treatment plants, and by reusing water in plant cooling and boiler systems.

Climate change could affect the availability of a secure and economical supply of water in some locations, which is essential for the continued operation of NRG's generation plants. Water risk is monitored by individual plant operators and reported based on severity. If it is determined that a water supply risk exists that could impact projected generation levels at any plant within two years, risk mitigation efforts are identified and evaluated for implementation. We rely on some fuel deliveries by barge and the success of that delivery depends on adequate water levels and favorable weather conditions. Water risk regarding the impact on barge delivery is evaluated on a daily basis, with contingency plans developed as needed.

### Performance and management

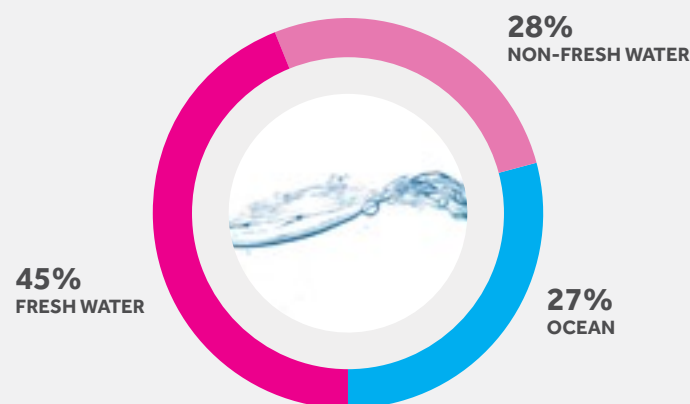
We set a goal to reduce water withdrawal 40 percent by 2030 from 2014 levels. **In 2017, we met this goal.** The goal was designed with the knowledge that our total water use is closely tied to once-through cooling at power plants. We expected that business strategies such as repowering plants from coal to gas would be important to our success. We also anticipated that a net decrease in generation at coal plants due to market conditions would lead to water use reduction. Both of these have occurred from 2014 to 2017, amplifying the impact of operational water management best practices at individual plants. Finally, in 2017, with changes to the composition of our generation fleet, we owned fewer plants with once-through cooling systems, leading us to achieve our goal early.

Using less water remains a priority, and with this goal met, we will evaluate how to have a bold and positive impact on water in the environment and in the communities where we operate.

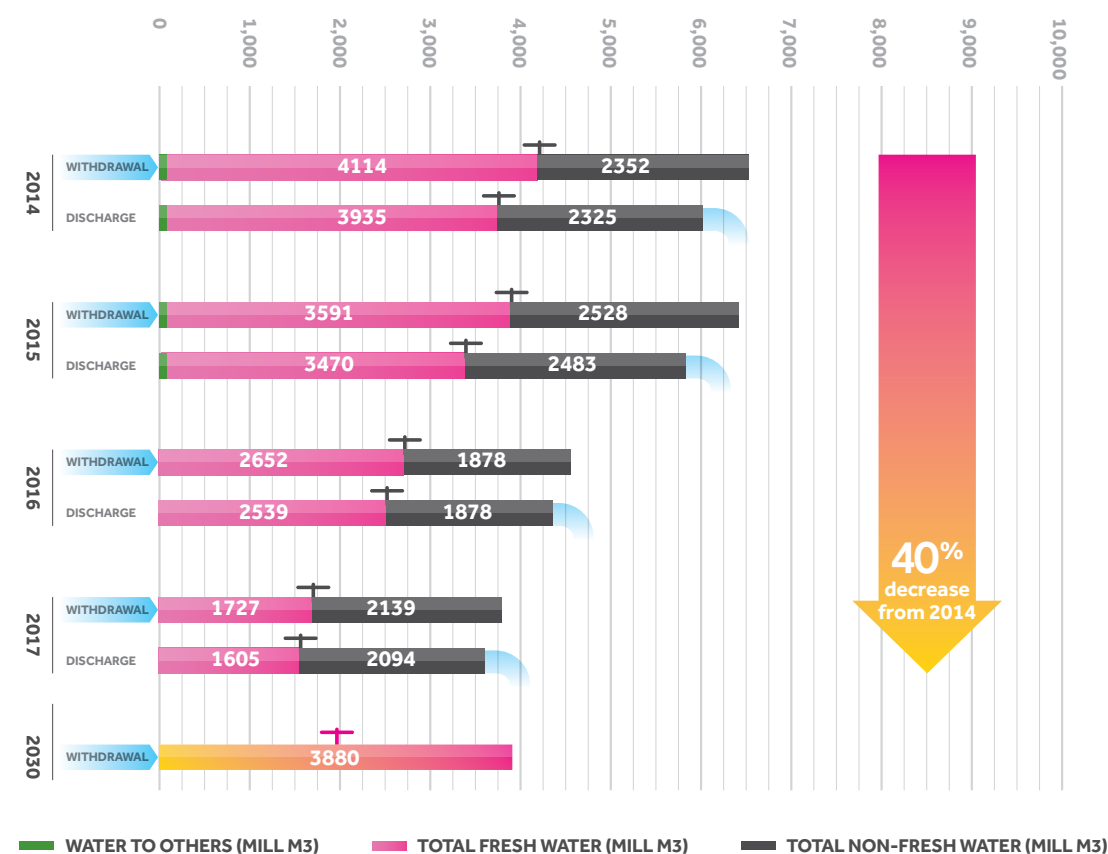
Our plants have a written water management plan and established water management best practices. Some of those best practices include:

- Creating a plant or multi-plant water management team to evaluate conservation ideas, monitor and optimize water use, develop and review procedures and provide employee training

### 2017 Water withdrawal by source



NRG Water Withdrawal and Discharge\*



\*GenOn assets have been removed from historical inventories

- Developing a water management plan that documents water sources, wastewater, optimal water use and water conservation and reuse/recycling goals
- Establishing a drought contingency plan in conjunction with local water authority recommendations
- Applying standard operating procedures to ensure consistent application of water management goals, annual review of documents and review of new technologies, ideas and best practices; they include written procedures to stay current with water supplier and water authority actions and requirements
- Training employees on standard operating procedures and communicating water management plans and drought contingency plans annually

Our 2017 water data include water withdrawal and discharge for all NRG generating stations and offices. Our facilities produced 106 million TWh of electricity and withdrew 3,865 million cubic meters of water. Approximately 96 percent of this water is discharged to the same body of water from which it was drawn. In 2017, we reduced water withdrawal from the previous year by 15 percent, 664.5 million cubic meters.

In accordance with the federal Clean Water Act, we obtain all required permits and report results of water discharges to state agencies monthly. We have 85 wastewater discharge permits and 21 exceedances were found and promptly recorded in 2017. Exceedance information is entered in our incident management system, which enables NRG management to identify the root cause and correct it. +

## By-products and waste

Our waste management programs cover both corporate offices and plants, however, the information below focuses on nonhazardous and hazardous waste from our generation facilities.

## Water effluents and waste

Reducing effluents and waste is important to us as stewards of the environment. For example, in completing the annual CDP Water Risk questionnaire we use tools such as state water quality studies and designations, the World Business Council for Sustainable Development water tool and the World Resources Institute's Aqueduct tool, to evaluate sustainability water impacts. Should a wastewater permit exceedance occur, we determine the root cause and correct it.

In 2017, we continued to enhance the current waste diversion program requiring NRG generating facilities to evaluate waste generated and identify recycling opportunities. Facilities worked with business partners to create a waste reduction and recycling plan.

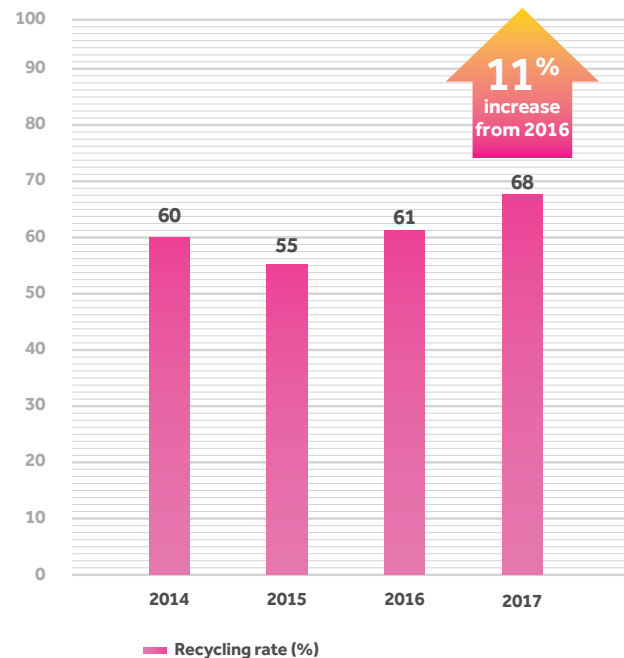
## Coal combustion residuals

In 2017, NRG owned and operated facilities generated 1.3 million metric tons of coal combustion residuals (CCR), more than 900,000 metric tons (68 percent) of which were recycled. That's a higher percentage of recycled CCR than in 2016, while overall CCR production declined 21 percent. The decline in production is due to less coal-fired generation because of market conditions and the lower overall availability of CCR for beneficial use due to fuel conversions and plant retirements.

On April 17, 2015, the EPA enacted a rule which regulates the disposal of CCRs. We maintain a CCR Rule Compliance Data and Information page on nrg.com as required.

NRG has 18 surface impoundments defined by 40 CFR 257.2 as a facility or part of a facility that is a natural topographic depression, human-made excavation or diked area formed primarily of earthen materials. The CCR regulations require impoundments that meet the criteria of 40 CFR 257.73 to have

(THE HIGHER THE PERCENTAGE, THE BETTER)  
Coal combustion residual recycling rate (%)\*



\* 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.

## NRG impoundment structural integrity rating and hazard potential classification

	Less than Low	Low	Significant	High	Incised*
Satisfactory	0	8	3	0	0
Fair	0	0	0	0	0
Poor	0	0	0	0	0
Unsatisfactory	0	0	0	0	0
Not applicable	0	3	0	0	3

\*Incised is an impoundment but is not subject to assessment because they do not have a dam. To align with EPA reporting, we've added a column for "Incised" and a row for "Not applicable" to account for all impoundments as defined by the EPA.

**Note:** Powerton Former Ash Basin will be evaluated by April 17, 2018, as required by the CCR regulation that is not in the scope of this report. It is therefore not included in the table.

a third-party professional engineer conduct a hazard potential classification assessment:

- High Hazard Potential includes dams where failure or misoperation will probably cause loss of human life
- Significant Hazard Potential includes dams where failure or misoperation would not result in probable loss of human life but could cause economic loss, environmental damage, disruption of lifeline facilities or impact other concerns
- Low Hazard Potential includes dams where failure or misoperation would not result in probable loss of human life and economic and/or environmental losses would be of low magnitude
- Less Than Low Hazard Potential includes dams that do not pose high, significant or low hazard potential +





## Environmental compliance: NRG Environmental Policy Statement

We are 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

### Management

Our environmental management program provides the foundation for us to take NRG beyond just compliance with legal requirements.

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 2017 was to have all our plants meet their plant-specific targets, and we achieved a 96.5 percent success result.

EKPI performance is tied directly to the compensation of some generation employees, fostering collective accountability and environmental commitment within the workforce.

To continuously improve environmental performance, we use an Environmental Management Information System (EMIS). This system provides us the tools and transparency to efficiently track our generation fleet's environmental performance. We use EMIS 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 NRG facilities to maintain environmental compliance in all activities and processes. In 2017, we hired an independent third party to conduct environmental audits

of some of our facilities. This program required prompt completion of both corrective and preventive actions for any negative findings or observations.

NRG's Environmental Bingo Box is a tool that communicates and tracks each power generation facility's completion of mandatory environmental initiatives. These initiatives are developed based on our performance and used as a proactive measure to improve environmental performance. Examples include developing site-specific environmental personnel transition plans (should key personnel be away unexpectedly), site-specific environmental operator boxes (an abbreviated list of permit limits, notification requirements, etc., for operators) and site-specific chemicals/fuel receiving and unloading procedures.

The figure to the right measures environmental compliance performance and illustrates a significant overall improvement since 2013.

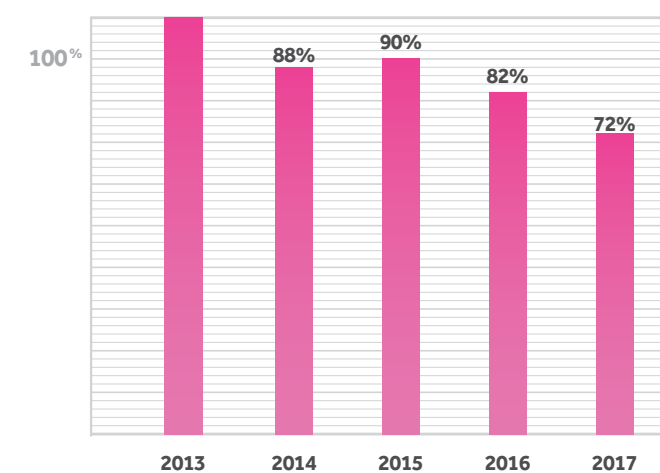
### Notices of violation

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

A summary of NRG's 2017 NOVs and spills includes the following\*:

- 11 NOVs received during 2017; 10 included no penalty, one NOV included fines totaling \$16,425
- Two reportable oil spills releasing approximately 1.5 barrels onto land and no releases to water
- Three reported unauthorized discharges of water from various systems, including settling ponds, and coal handling systems, which released approximately 10 barrels. 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 +

**% OF BASELINE (LOWER IS BETTER)**  
**Environmental performance metric**



Our environmental performance metric counts environmental incidents such as reportable spills, permit deviations and receipt of Notices of Violation. Fewer incidents means a lower score. The chart shows the company's EKPI score per year as a percentage of the baseline year of 2013.

\* As of Dec. 31, 2017  
Note: The baseline grid is adjusted to include the history of sites that NRG began operating in 2015



## econrg

econrg® promotes ecological stewardship among our plant employees with initiatives aimed at improving environmental awareness and education.

In 2017, NRG plant employees participated in 191 voluntary econrg projects and NRG facilities donated \$75,325 to benefit the environment. These projects and initiatives focused on the following areas:

- **Biodiversity:** 24 projects included trout stream habitat enhancement, peregrine falcon chick banding, building an osprey nesting platform, humane bird abatement, stocking native fish in local rivers, and conducting migratory bird and reptile surveys
- **Water use:** 10 projects will save approximately 401 million gallons annually by reclaiming water, increasing total dissolved solids tolerances, making chemical treatment improvements, increasing pump efficiencies, educating employees on water-saving practices and collecting rainwater
- **Emission reduction:** 10 projects were aimed at reducing the consumption of natural resources by purchasing electric vehicles for employee commutes and installing LED lighting, high-efficiency variable speed drives, solar panels in remote areas and motion sensor lighting
- **Environmental stewardship:** 70 projects (included beach cleanups, equipment donations, science fairs, in-kind technical support and fundraisers for college scholarships)
- **Environmental initiative:** 26 projects
- **Operational efficiency:** 20 projects
- **Waste management:** 31 projects

## 2017 econrg Environmental Stewardship Award

The econrg Environmental Stewardship Award is given annually to one plant that has made a significant difference in its local community and environment. A select panel of NRG's environmental leaders reviewed submitted applications to determine the winner.

In 2017, our Middletown Power Station in Middletown, Connecticut, received the award. The plant's employees took part in environmental initiatives spanning biodiversity, community involvement and environmental stewardship. Their involvement included:

### Source to Sea Cleanup Project

Middletown employees cleaned up Dart Island and the adjoining shorelines of the Connecticut River. The event itself was hosted by the Connecticut River Conservancy (CRC) river steward.

### Water Chestnut Survey

Employees learned to identify water chestnut, an invasive species, and utilized the facility's boat to explore areas along the Connecticut River near the plant and determine where the species was growing. This information was used by the CRC to create maps to help organize volunteer teams as they were deployed to remove water chestnut plants from the river.

### YMCA Waterfront Improvement Stairway Erosion Projects

Middletown Plant and Regional/Corporate personnel donated their time to construct a waterfront stairway to the beach at YMCA Camp Ingersoll, located in Portland, Connecticut. A complete stairway from the changing-room building to the waterfront beach was constructed. +



Volunteers at Galveston Bay project, part of 2017 positiveNRG day.

## Biodiversity

Biodiversity promotes healthy ecosystems and human interaction with nature. That's why we designed our environmental policy to foster the protection of the natural habitats surrounding our generation sites. Protecting and promoting biodiversity ensures that living resources will remain in stable quantities in perpetuity. The air we breathe, leaves on trees and even a spider's web serve important biodiversity functions. It is our obligation as a company and as employees to effectively use and protect all natural resources in a sustainable way.

### Cedar Bayou EcoCenter

We operate the Cedar Bayou EcoCenter on Galveston Bay in Texas to increase public awareness of the needs of the ecosystem, offer wetland education and develop solutions for coastal issues and restoration.

The EcoCenter also is a resource for unique partnerships with coastal restoration organizations, educators who support No Child Left Inside and groups creating public awareness

of coastal issues. The EcoCenter plant nursery grows the majority of wetland plants used for estuarine restoration in Galveston Bay and sits on 14 acres of land consisting of 24 earthen ponds, six above-ground constructed ponds, a greenhouse, a classroom and a laboratory.

In 2017, we donated 200,000 plugs of smooth cordgrass that restored approximately 24 acres of intertidal wetlands. Our donations are critical to the restoration directives of more than a dozen third-party conservation organizations around the country.

Wetland education is an important component of the EcoCenter. Through a partnership with the Galveston Bay Foundation's Get Hip to Habitat program, area schools participate in a hands-on science module that includes wetland education, plant harvests, plant growth on school campuses, water chemistry and plant yield. At the end of the school year, the plants are used in coastal restoration. In 2017, more than 508 students from 13 schools visited the EcoCenter through the Get Hip to Habitat program.

### Wildlife diversity at NRG sites

We are committed to attracting and maintaining biodiversity at our power plants by building nesting and resting structures for native wildlife. Examples of employee-driven projects at our generation stations include:

- Our Avenal solar farm seasonally grazes sheep beneath its solar panels to reduce the possibility of wildfires from dry vegetation. Choosing grazing over mowing and herbicides helps preserve the site's biodiversity integrity

### Endangered or threatened species

We've identified areas of operation that have documented endangered or threatened species of wildlife, according to the IUCN Red List and national conservation list species:

- California Valley Solar Ranch has one critically endangered, two endangered and three least-concern species
- Ivanpah Concentrated Solar Power Project has one vulnerable species
- Powerton Station has one endangered species
- Buckthorn Wind Farm has one endangered species
- Alta Wind Farm has one endangered species

All species and their respective habitats are addressed and mitigated through voluntary action plans, site permits, monitoring plans and conservation easements.



### Ivanpah

In 2013, our Ivanpah Solar Electric Generating System necessitated the translocation of desert tortoises. As a part of the project's extensive desert tortoise protection program, we have helped establish a head start program at the Ivanpah project site. Head start programs are crucial to the repopulation of the desert tortoise, a federally listed threatened species. In their natural environment, approximately two percent of juvenile desert tortoises reach breeding age due to factors such as predation, drought and disease. The head start program significantly increases their survival rate.

In our ongoing effort to reduce avian mortality at the Ivanpah solar project, we created an elevated door system that allows roadrunners to pass through facility fences. This reduces fatal collisions that are thought to result from roadrunners trying to evade predators.

Many regulatory agencies were involved in the nearly four-year permitting process of the Ivanpah solar project, including those that specialize in the protection of birds and other species. Ivanpah was reviewed and approved by the California Energy Commission and Bureau of Land Management with significant input and guidance from the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife. Learn more [here](#). ✚



# SUSTAINABLE WORKPLACE

The sustainable energy future we envision requires involvement from all our ~6,000 employees.<sup>41</sup> Providing a sustainable work environment helps us align our actions with our core values, vision and mission. This means providing a workplace that allows our employees to execute at the highest levels and return home safely to their loved ones. It means actively engaging in our communities and supporting our partners. It means investing in our colleagues and supporting causes and organizations in which we believe. Ultimately, we are a product of the people and places that surround us, and ensuring a sustainable workplace is important to our work and how customers, suppliers and communities perceive us.

We have established goals that would help all our offices and facilities become truly sustainable workplaces by 2020. We are also developing a strategy to measure, report and improve our efforts to reach those goals. That includes tracking program participation, increasing employee engagement and benchmarking company-wide participation in NRG sustainability initiatives. By cultivating a sustainable workplace, we will cultivate sustainability advocates throughout the organization.

## Goals and Performance

Our 2020 Sustainable Workplace goals are:

- Have 100 percent of our offices engage in sustainability initiatives<sup>42</sup>

- Get 50 percent of our employees sustainability certified<sup>43</sup>
- Have 75 percent of our employees active in sustainable workplace programs<sup>44</sup>
- Achieve 90 percent office waste diversion<sup>45</sup>
- Have 50 percent of employees cite sustainability as a top reason to recommend NRG as a place to work<sup>46</sup>

Baselines and methodologies are being developed for these goals, and progress will be communicated as these efforts unfold. The following sections highlight some of the programs that will help us achieve these goals. As mentioned, efforts are under way to realize and report against them. +

<sup>41</sup> As of December 31, 2017

<sup>42</sup> Every workplace will take part in at least one sustainability-focused project via resource reduction, community engagement or volunteering. We'll align this program with our successful econrg and positiveNRG initiatives.

<sup>43</sup> An internal education and certification program will empower employees to use sustainability as a strategic decision-making tool. This training was developed in 2017 and a pilot initiated late in the year.

<sup>44</sup> The definition of "active" and the list of qualified programs are under development.

<sup>45</sup> Office waste is defined as municipal solid waste sent to landfill. This applies only to NRG offices because industrial waste is part of our Sustainable Operations program.

<sup>46</sup> Internal survey of employees to begin tracking will initiate in 2018.

## Wellness

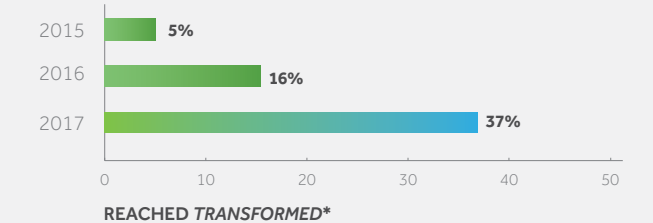
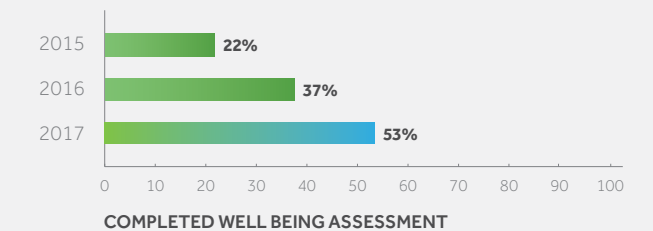
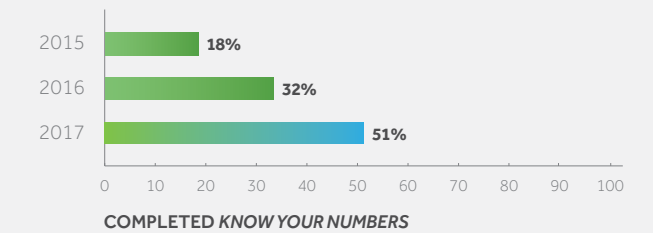
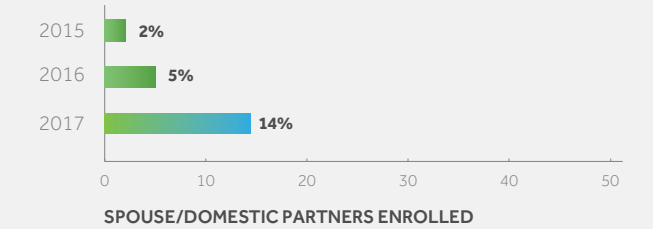
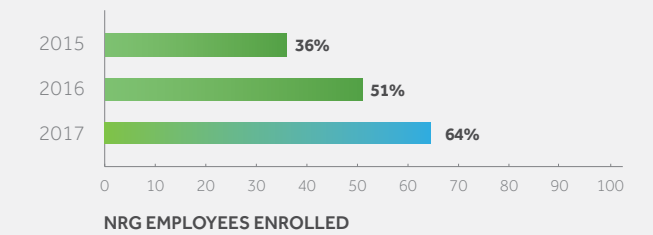
To keep our employees healthy, happy and operating at their best, NRG provides several wellness benefits. We offer full and part-time employees scheduled to work 20 or more hours per week health, dental and vision insurance, mental health assistance, a non-tobacco user discount, adoption assistance, parental leave and tuition reimbursement, among other benefits. Additionally, we sponsored more than a dozen runs, walks and bike rides to promote healthy behavior and hosted more than 25 employee health fairs in 2017 at NRG locations across the country.

## Power up my life

In 2017, we expanded **Power up my life**, our employee wellness initiative, to further incentivize physical and mental well-being among our workforce. This program is also available to employee spouses/domestic partners. With the introduction of the **PowerUp nutrition** platform, members enrolled in **Power up my life** are offered free membership in three different weight management programs: Omada, Naturally Slim® and Weight Watchers®.

With a participation rate of 64%, **Power up my life** continues to be one of our strongest employee initiatives with increased engagement year after year.

## Power up my life



\*This is the highest level of participation awarded to employees and their spouses

### CSA Program

Launched in January 2017, the NRG Community Supported Agriculture (CSA) Program offers full-time employees an annual reimbursement per household for purchasing a "share" of a local farm's produce. The program aims to improve employee health, engage deeper with our communities and reduce personal carbon impacts.

As the CSA program took hold in 2017, its benefits and value was reinforced in several tangible ways. In some communities, participation extended beyond our own employees to other building tenants. In other cases, the efforts and engagement of an individual employee influenced others to join in. Finally, a "double-down" effect was experienced near some facilities. In this circumstance, employees not only supported the farm as a non-profit that provides food to the needy, but also supported a larger network through the building of community gardens and the conducting of educational outreach programs.

### Flexible Work Policy

To reduce employee commuting time and related carbon footprint, NRG introduced a Flexible Work Policy in November 2016 that provides eligible employees the opportunity to occasionally work remotely and/or work an adjusted-hours schedule. The policy enhances our workplace culture, supports our commitment to sustainability by capturing data about avoided commute emissions, and improves our employees' ability to balance work and personal commitments – all while preserving business continuity and performance. In 2017 about 10% of employees were officially enrolled in the program. Of those participating, the average commute by vehicle was 22 miles a day. By working from home instead of driving to work just one day a week, each employee could potentially avoid emitting approximately 950 pounds of CO<sub>2</sub> annually.<sup>47</sup> +

<sup>47</sup> Calculation based on EPA's GHG emissions from a typical passenger vehicle from driving one mile.

#### NRG CSA Program Highlights:

- Provides economic stability to farmers through the subscription set-up, ensuring income from the start of the season



**58**  
farms supported through the NRG CSA program<sup>5</sup>

- Keeps roughly \$58 of every \$100 spent in the local economy



**\$10,000**  
staying in local communities where employees live and work

- Creates a relationship between the farm and the consumer, increase social awareness within our community and where our food comes from

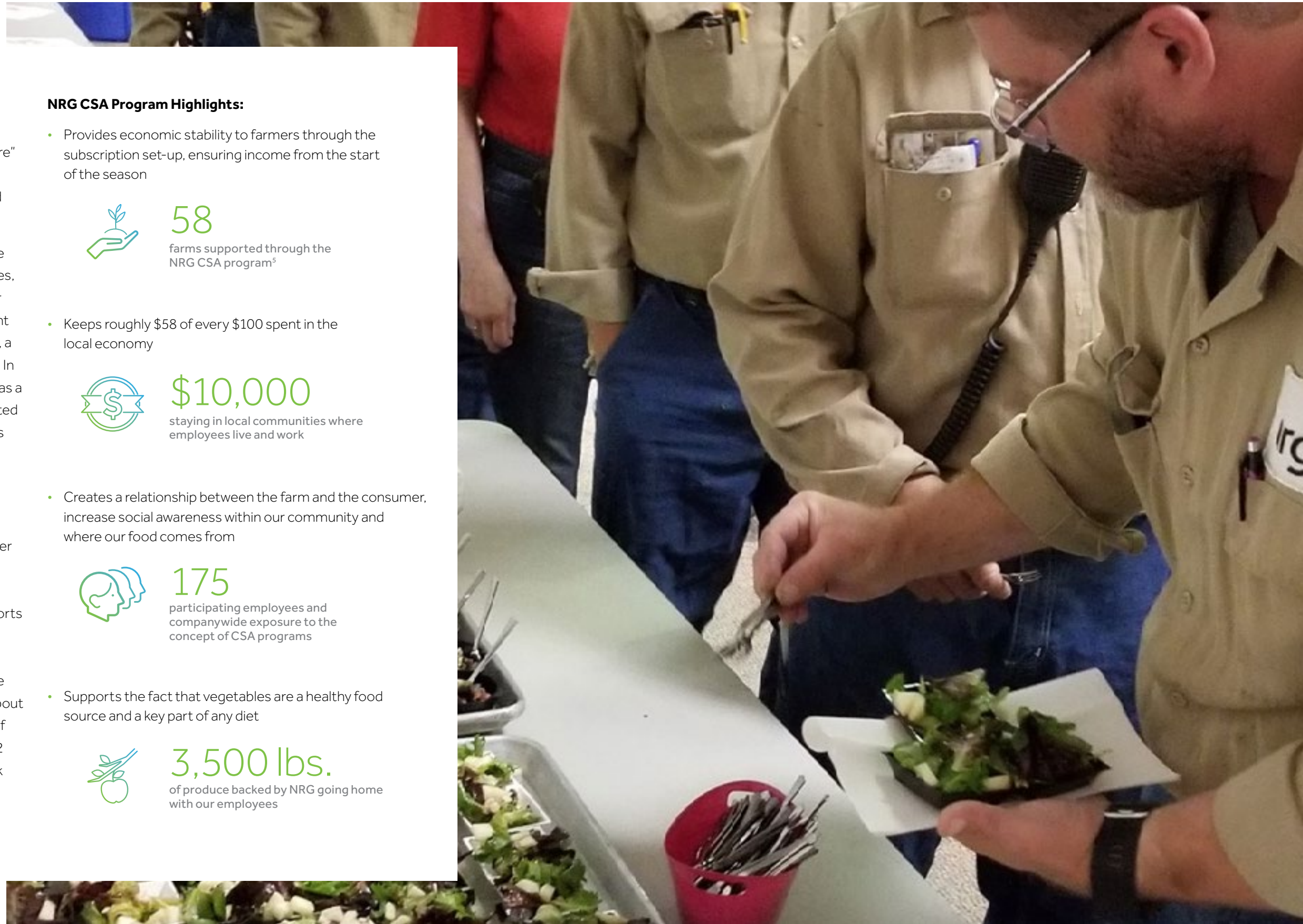


**175**  
participating employees and companywide exposure to the concept of CSA programs

- Supports the fact that vegetables are a healthy food source and a key part of any diet



**3,500 lbs.**  
of produce backed by NRG going home with our employees



Employees in Illinois Enjoying a food tasting at a cooking demo.





## Employee engagement

Creating a sustainable energy future requires a talented workforce operating at its best. The greatest potential of NRG is its people. We provide our ~6,000 employees the opportunity to work together to find new and innovative ways to realize the potential of energy. In 2017, we took a fresh look at our employee initiatives to expand the ways we attract, inspire, develop and thank the people who power us.

### InspireMENrg

InspireMENrg is a web-based and mobile platform where NRG employees can take actions that reflect sustainable choices at work and at home. The program launched at the end of 2014 and continues to be a place where employees engage in topics ranging from water conservation to NRG-specific activities such as wellness programs available to employees.

21% of all employees participate in the program, with the vast majority taking action on a regular basis. Employees have taken over 15,000 actions including energy efficiency, waste management, personal awareness and emissions reduction – for example, unplugging chargers and appliances when not in use, recycling, taking the stairs instead of the elevator and cooking a meat-free meal.

### NRG Green Ambassadors

The Green Ambassadors program provides employees an opportunity to engage with co-workers across the organization to learn about and participate in sustainability initiatives. It is a group that is open to anyone wanting to engage and help drive positive change in the workplace. In 2017, there were more than 85 Green Ambassadors that came together monthly for webinars covering everything from how we use sheep at our solar and wind farms to remove noxious and tumble-weed producing plants, to employee-to-employee dialogue on the experience of Hurricane Harvey. In addition, our Green Ambassadors act as local catalysts for sustainability initiatives and behaviors at their location, whether at an office or a power plant.

### Princeton HQ Composting

This program was launched late in 2016 and fully took hold in 2017. Involving both food service team members and employees from throughout the company, it resulted in tangible measures of success. Among them:

- The amount of food waste going to landfill was reduced from 50% to 20% <sup>48</sup>
- Employees were also offered reusable food trays – approximately 100 were provided to those who proactively opted-in to reduce waste
- The program was launched as part of a broader commitment to achieve 90% office waste diversion

<sup>48</sup> Estimate based on average diversion rate from swapping out compost bins for landfill bins in the collection areas

### mynrgRewards

In addition to our traditional benefits and incentives, we always look for ways to improve how we reward and recognize our employees. Since April 2013, the mynrgRewards program has recognized high-performance employees with points they can redeem online for prizes such as electronics, gift cards and cruises. In 2017, the program continues to allow any employee to recognize their colleagues for a job well done.

### Career development

In 2017, we prepared to launch a new module for our human capital management system, Impraise. This product features new tools and ways of connecting, with the goal of creating a more feedback-rich culture at NRG. As a web-hosted application for desktop and mobile devices, Impraise is a more agile, user-friendly way to set goals and exchange feedback with colleagues. We look forward to this next chapter on our performance management journey, creating a more connected, supportive and engaged workforce through authentic and accessible feedback.

### Employee and recruitment resources

NRG employees have access to a number of groups and programs that provide support for diversity-related issues and initiatives:

- Women in Power offers mentoring opportunities for women in leadership positions to encourage more female participation in the male-dominated operations environment
- Diversity, Inc. is a leading benchmarking/consulting publication; our subscription allows us to access reports and best practices to use throughout the company
- Our membership in both Gartner Group's Corporate Leadership as well as their Diversity and Inclusion Councils provide access to whitepapers and research from Fortune 500 companies on best practices in diversity and all HR competencies as well as training for our own employees on various diversity and inclusion topics
- We subscribe to the Professional Diversity Network, an online platform including more than 30 diverse organizations that help us market our jobs to a variety of ethnic, gender, disabled and veteran-based audiences
- We engage nationally with many diverse organizations, including Recruit Military, IvyQ, NAACP, ProWomen, American Association of Blacks in Energy and the Black Data Processing Association; locally, our business groups often engage with technical schools and diverse organizations that support volunteering and recruiting needs
- Our job postings are automatically promoted on state workforce commission and veteran outplacement websites across the U.S.+



## Workforce diversity

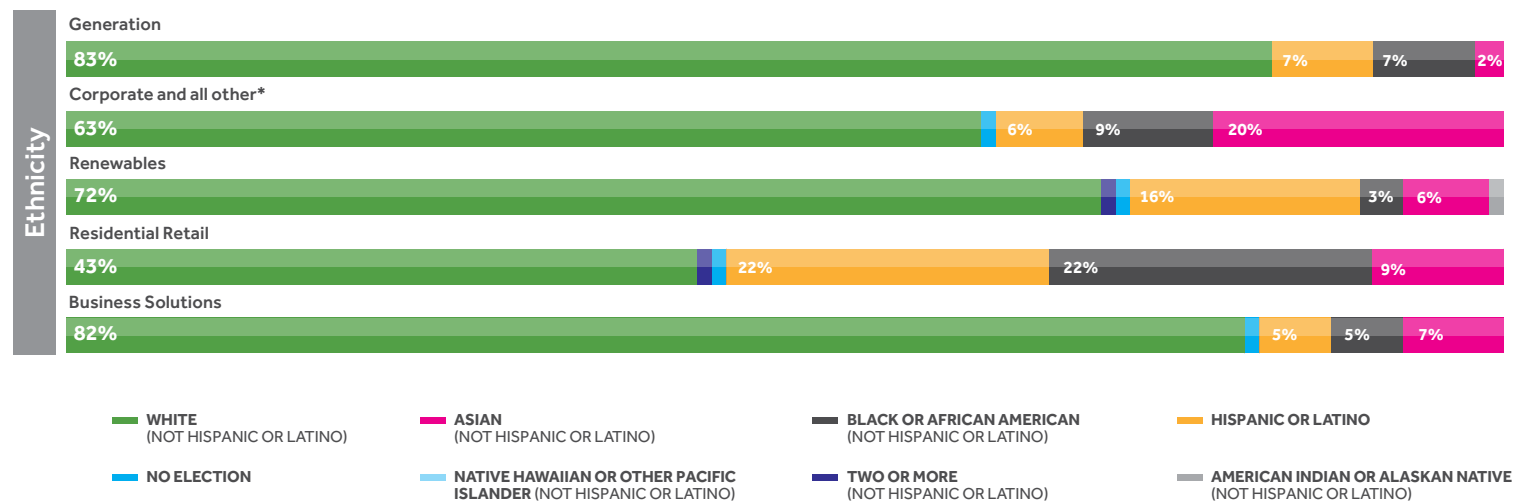
Diversity in talent, gender, ethnicity, sexual orientation, cultural perspectives and experiences is essential for us to achieve our goals. We aspire to create a culture that fosters inclusion, inspires innovation, encourages respect and promotes unlimited success for everyone as we create a sustainable energy future. We also recognize that the power-generation sector, including NRG, has a lot of room for improvement.

### U.N. Women's Empowerment Principles

In 2017, we continued to conduct a benchmarking study to assist us in identifying our strengths and opportunities regarding diversity and inclusion. The study analyzed quantitative and qualitative data across our employee lifecycle – from recruitment and selection to development and retention – and the results will inform our strategic diversity plan in 2018.

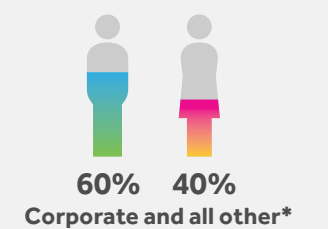
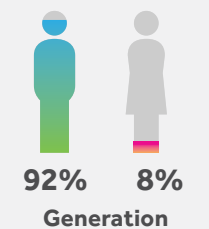
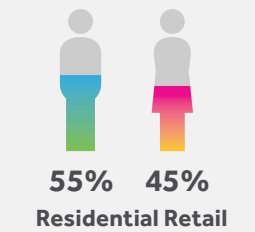
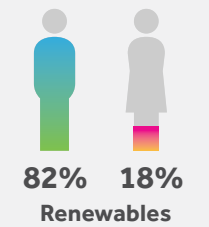
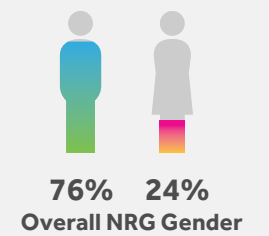
As part of that plan, NRG became the first U.S. power company to sign on to the [U.N. Women's Empowerment Principles](#):

1. Establish high-level corporate leadership for gender equality
2. Treat all women and men fairly at work; respect and support human rights and nondiscrimination
3. Ensure the health, safety and well-being of all women and men workers
4. Promote education, training and professional development for women
5. Implement enterprise development, supply chain and marketing practices that empower women
6. Promote equality through community initiatives and advocacy
7. Measure and publicly report on progress to achieve gender equality +



## Workforce diversity

### Gender



\* Includes employees not in Business Solutions, Renewables or Residential Retail. As of Dec. 31, 2017.



PositiveNRG, our corporate philanthropy program, enriches the communities we serve by supporting initiatives that address education, human welfare, the environment, and health and wellness. Learn more about positiveNRG [here](#).

The mission of our giving programs, including NRG Gives and Reliant Gives, is to support causes that are important to our employees and communities. Through this crowd-sourced charitable giving program, employees nominate nonprofits, narrow the list of potential recipients down to three, and then the public at large votes for the organizations to receive up to a \$100,000 donation. Since the programs began in 2016, nearly two million public votes were received, and the NRG Retail Charitable Foundation donated \$840,000 to 26 charities in the communities that Reliant and NRG serve.

### Partnerships

NRG supports organizations that engage communities, empower young minds, aid in disaster relief and help protect ecosystems.



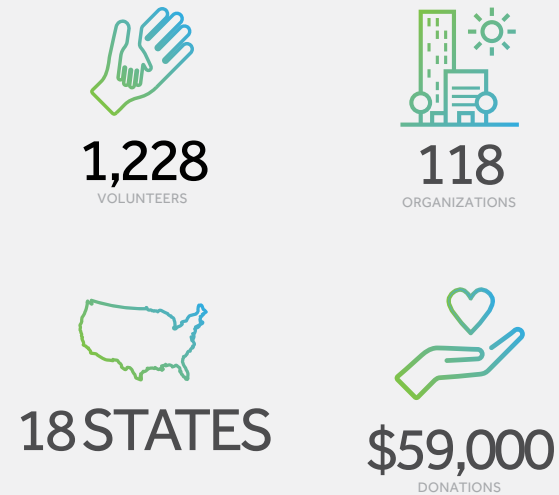
Jazams parklet in downtown Princeton, NJ

### PositiveNRG Week

PositiveNRG week is our annual week-long philanthropy initiative where company-wide volunteer opportunities are available for employees.

For the tenth straight year, NRG employees spent a week making a positive impact in their communities. During positiveNRG week, 1,228 NRG employees in 18 states volunteered at 118 non-profit organizations and donated \$59,000 to charitable causes.

### 2017 positiveNRG Week Impact



### Princeton Parklet

In 2017 NRG, Princeton University, Jazams toy store, The Princeton Arts Council, and Princeton Public Library came together for a collaborative effort of business, community and academia to bring an educational energy "parklet" to downtown Princeton. Electricity plays a key role in daily life but it is often a completely abstract concept to most of us who use it. By bringing kinetic, hydro, solar photovoltaic and wind to life in this parklet, children will get hands-on education as to not only how energy works, but the variety of ways it can be generated and stored.

In early 2018, the Princeton Energy Parklet won a New Jersey American Society of Landscape Architects, (NJASLA), design award.



The Lowline Young Ambassadors visit NRG and Sustainable Princeton (photo taken at the parklet).

### Lowline Partnership

Inspired by the Lowline's commitment to using green technology to reimagine New York City's infrastructure, coupled with our mutually aligned goals to support science, technology, engineering and math (STEM) education, NRG proudly partnered with the Lowline to support high school students through their [Young Ambassador](#) program. In October, we hosted the Young Ambassadors at our LEED Certified Headquarters in Princeton where the students learned about renewable energy technologies, grey water systems and back up generation. They also visited the Jazams parklet where they were able to learn and ask questions about

how to create engaging public installations. The students left with lots of new ideas and concepts that they want to incorporate into the Lowline's design.

### Grid Alternatives

Since 2013, NRG has partnered with this organization to help provide solar to low-income families. Accomplishments in 2017 saw NRG volunteers install 78kW of solar, allowing more than 60 families to benefit from clean energy. More specifically, this represents \$610,000 in terms of lifetime value of clean energy produced, and a clean-air equivalent of planting 36,300 trees.



### The Conservation Fund

NRG is collaborating with The Conservation Fund's sustainable economic development arm, Natural Capital Investment Fund (NCIF), to advance clean energy and green jobs in the heart of coal country. NCIF is developing projects that will use solar panels donated by NRG to help a West Virginia nonprofit organization make critical energy efficiency updates. The panels will be installed through Rewire Appalachia, a partnership between Solar Holler and Coalfield Development Corporation that supports workforce development across the state by training and employing displaced coal workers in solar and modern energy technology.

### Employee goodwill programs

Many of our employees serve as outstanding leaders and ambassadors in the communities where they live and work. NRG employees from our offices and power plants across the country dedicate time, expertise and financial support to help those in need. NRG initiatives include community projects and events we sponsor. To encourage and reinforce participation in our positiveNRG program, NRG supports a variety of goodwill programs year-round. Read more about these opportunities [here](#).

### NRG Cycling Team – MS 150

Besides supporting an annual bike-riding event that supports MS research, employees who take part engage through their active involvement in a two-day, 150-mile challenge – pedaling from Houston to Austin. Training and fund-raising activities take place in the weeks and months leading up to the event itself, fostering stronger relationships, team-building and company pride in the process. Many employees take part year-after-year on a continual basis.

For 2017, 35% of cycling team members came from outside of Texas, with participants representing 10 different states across the NRG footprint, as well as a representative mix of core job functions – 40% retail, 36% generation, 24% corporate. In addition, 36% of riders were female.

Perhaps the most noteworthy number of all from 2017 relates to the money raised for the MS cause. In total, more than \$1 million was raised by all corporate participants. The NRG contribution of \$1,615 per rider exceeded the event's overall per rider amount of \$1,500.

### American Diabetes Association

Health and wellness is an important part of the NRG culture. When a higher risk for diabetes and related illnesses was discovered among the NRG employee base, a partnership with the ADA was initiated. The goal? Educate employees and incorporate new opportunities for them to engage in healthier lifestyle choices. This included:

- ADA-hosted cooking demonstrations, held at multiple plants and offices
- Employee-led biking teams that engaged more than 169 individuals in promoting exercise as part of a healthy lifestyle
- Biometric testing to uncover employees at risk
- Monthly messaging and incentives based on healthier cooking options, exercise alternatives, and tips on how to mitigate risk 🍀

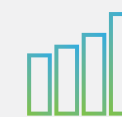
## 2017 positiveNRG Impact



**21,792**  
VOLUNTEER HOURS



# OF STATES THAT RECEIVED A DONATION  
**25 STATES**  
plus DC & 3 countries



**~\$7.6M**  
IN TOTAL DONATIONS



**\$65,000**  
GIVEN TO SCHOLARSHIPS



**1,460**  
EMPLOYEES PARTICIPATED



**\$2,970,387**  
DONATED TO SUPPORT  
2017 DISASTER RELIEF EFFORTS



**541**  
NONPROFITS SERVED  
BY NRG VOLUNTEERS



**AWARD**  
BIG BROTHERS BIG SISTERS  
CORPORATE PARTNER

## FEEDBACK

If you have any comments or questions about this report, or would like more information on our sustainability efforts, please visit [nrg.com](http://nrg.com) or email [sustainability@nrg.com](mailto:sustainability@nrg.com).

## FORWARD-LOOKING STATEMENTS

## SAFE HARBOR:

In addition to historical information, the information presented in this report includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Exchange Act. These statements involve estimates, expectations, projections, goals, assumptions, known and unknown risks and uncertainties and can typically be identified by terminology such as "may," "should," "could," "objective," "projection," "forecast," "goal," "guidance," "outlook," "expect," "intend," "seek," "plan," "think," "anticipate," "estimate," "predict," "target," "potential" or "continue" or the negative of these terms or other comparable terminology. Such forward-looking statements include, but are not limited to, statements about the Company's future revenues, income, indebtedness, capital structure, plans, expectations, objectives, projected financial performance and/or business results and other future events, and views of economic and market conditions. Although NRG believes that its expectations are reasonable, it can give no assurance that these expectations will prove to be correct, and actual results may vary materially. Factors that could cause actual results to differ materially from those contemplated herein include, among others, general economic conditions, hazards customary in the power industry, weather conditions, competition in wholesale power markets, the volatility of energy and fuel prices, failure of customers to perform under contracts, changes in the wholesale power markets, changes in government regulations, the condition of capital markets generally, our ability to access capital markets, unanticipated outages at our generation facilities, adverse results in current and future litigation, failure to identify, execute or successfully implement acquisitions, repowerings or asset sales, our ability to implement value enhancing improvements to plant operations and companywide processes, our ability to implement and execute on our publicly announced transformation plan, including any cost savings, margin enhancement, asset sale, and net debt targets, our ability to proceed with projects under development or the inability to complete the construction of such projects on schedule or within budget, risks related to project siting, financing, construction, permitting, government approvals and the negotiation of project development agreements, our ability to progress development pipeline projects, the timing or completion of GenOn's emergence from bankruptcy, the inability to maintain or create successful partnering relationships, our ability to operate our businesses efficiently, our ability to retain retail customers, our ability to realize value through our commercial operations strategy, the ability to successfully integrate businesses of acquired companies, our ability to realize anticipated benefits of transactions (including expected cost savings and other synergies) or the risk that anticipated benefits may take longer to realize than expected, our ability to close the Drop Down transactions with NRG Yield, and our ability to execute our Capital Allocation Plan. Debt and share repurchases may be made from time to time subject to market conditions and other factors, including as permitted by United States securities laws. Furthermore, any common stock dividend is subject to available capital and market conditions. 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. Additional factors could cause results to differ materially from those described in the forward-looking statements can be found in NRG's 2017 Annual Report on Form 10-K and the Company's other filing with the Securities and Exchange Commission at [www.sec.gov](http://www.sec.gov).

**APPENDIX A**  
**REG G: RECONCILIATION OF ADJUSTED EBITDA**  
**FROM LOW-CARBON SOURCES**

	2014	2015	2016	2017
Net loss	(183)	(150)	(414)	(278)
Interest expense, net	219	226	247	259
Income tax	-	(18)	(20)	(20)
Depreciation, amortization and ARO	300	379	391	412
Amortization of contracts	23	47	62	62
Adjustment to reflect NRG share of adjusted EBITDA	29	50	106	81
Other non-recurring costs	(3)	5	3	11
Asset write-offs and impairments	34	22	352	204
MtM losses/(gains)	(6)	5	6	12
<b>Adjusted EBITDA</b>	<b>412</b>	<b>566</b>	<b>734</b>	<b>742</b>

EBITDA and Adjusted EBITDA are non-GAAP financial measures. These measurements are not recognized in accordance with GAAP and should not be viewed as an alternative to GAAP measures of performance. The presentation of Adjusted EBITDA should not be construed as an inference that NRG's future results will be unaffected by unusual or non-recurring items.

EBITDA represents net income before interest (including loss on debt extinguishment), taxes, depreciation and amortization. EBITDA is presented because NRG considers it an important supplemental measure of its performance and believes debt-holders frequently use EBITDA to analyze operating performance and debt service capacity. EBITDA has limitations as an analytical tool, and you should not consider it in isolation, or as a substitute for analysis of our operating results as reported under GAAP. Some of these limitations are: (i) EBITDA does not reflect cash expenditures, or future requirements for capital expenditures, or contractual commitments; (ii) EBITDA does not reflect changes in, or cash requirements for, working capital needs; (iii) EBITDA does not reflect the

significant interest expense, or the cash requirements necessary to service interest or principal payments, on debt or cash income tax payments; (iv) although depreciation and amortization are non-cash charges, the assets being depreciated and amortized will often have to be replaced in the future, and EBITDA does not reflect any cash requirements for such replacements; and (v) other companies in this industry may calculate EBITDA differently than NRG does, limiting its usefulness as a comparative measure. Because of these limitations, EBITDA should not be considered as a measure of discretionary cash available to use to invest in the growth of NRG's business. NRG compensates for these limitations by relying primarily on our GAAP results and using EBITDA and Adjusted EBITDA only supplementally. See the statements of cash flow included in the financial statements that are a part of this news release.

Adjusted EBITDA is presented as a further supplemental measure of operating performance. As NRG defines it, Adjusted EBITDA represents EBITDA excluding impairment losses, gains or losses on sales, dispositions or retirements of

assets, any mark-to-market gains or losses from accounting for derivatives, adjustments to exclude the Adjusted EBITDA related to the non-controlling interest, gains or losses on the repurchase, modification or extinguishment of debt, the impact of restructuring and any extraordinary, unusual or non-recurring items plus adjustments to reflect the Adjusted EBITDA from our unconsolidated investments. The reader is encouraged to evaluate each adjustment and the reasons NRG considers it appropriate for supplemental analysis. As an analytical tool, Adjusted EBITDA is subject to all of the limitations applicable to EBITDA. In addition, in evaluating Adjusted EBITDA, the reader should be aware that in the future NRG may incur expenses similar to the adjustments in this report.

Management believes Adjusted EBITDA is useful to investors and other users of NRG's financial statements in evaluating its operating performance because it provides an additional tool to compare business performance across companies and across periods and adjusts for items that we do not consider indicative of NRG's future operating performance. This measure is widely used by debt-holders to analyze operating performance and debt service capacity and by equity investors to measure our operating performance without regard to items such as interest expense, taxes, depreciation and amortization, which can vary substantially from company to company depending upon accounting methods and book value of assets, capital structure and the method by which assets were acquired. Management uses Adjusted EBITDA as a measure of operating performance to assist in comparing performance from period to period on a consistent basis and to readily view operating trends, as a measure for planning and forecasting overall expectations, and for evaluating actual results against such expectations, and in communications with NRG's Board of Directors, shareholders, creditors, analysts and investors concerning its financial performance.

Adjusted cash flow from operating activities is a non-GAAP measure NRG provides to show cash from operations with the reclassification of net payments of derivative contracts acquired in business combinations from financing to operating

cash flow, as well as the add back of merger, integration and related restructuring costs. The Company provides the reader with this alternative view of operating cash flow because the cash settlement of these derivative contracts materially impact operating revenues and cost of sales, while GAAP requires NRG to treat them as if there was a financing activity associated with the contracts as of the acquisition dates. The Company adds back merger, integration related restructuring costs as they are one time and unique in nature and do not reflect ongoing cash from operations and they are fully disclosed to investors.

Free cash flow (before Growth investments) is adjusted cash flow from operations less maintenance and environmental capital expenditures, net of funding, preferred stock dividends and distributions to non-controlling interests and is used by NRG predominantly as a forecasting tool to estimate cash available for debt reduction and other capital allocation alternatives. The reader is encouraged to evaluate each of these adjustments and the reasons NRG considers them appropriate for supplemental analysis. Because we have mandatory debt service requirements (and other non-discretionary expenditures) investors should not rely on free cash flow before Growth investments as a measure of cash available for discretionary expenditures.

Free Cash Flow before Growth Investment is utilized by Management in making decisions regarding the allocation of capital. Free Cash Flow before Growth Investment is presented because the Company believes it is a useful tool for assessing the financial performance in the current period. In addition, NRG's peers evaluate cash available for allocation in a similar manner and accordingly, it is a meaningful indicator for investors to benchmark NRG's performance against its peers. Free Cash Flow before Growth Investment is a performance measure and is not intended to represent net income (loss), cash from operations (the most directly comparable U.S. GAAP measure), or liquidity and is not necessarily comparable to similarly titled measures reported by other companies. +

## APPENDIX B SASB REPORT



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 2017 Form 10-K and in NRG's 2017 Sustainability Report. Quantitative data is 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 [Reporting](#) in the 2017 Sustainability Report.

SASB code	Accounting metric	2017
<b>Greenhouse gas emissions and energy resource planning</b>		
IF0101-01	<b>(1) Gross global scope 1 emissions (million metric tons)</b>	51,000,000* <small>*Rounded to nearest million. Includes 37.5% ownership of 144MW capacity natural gas plant in Turkey and 80% of a 605MW capacity coal plant in Australia. Excludes GenOn assets.</small>
	<b>(2) Percentage covered under emissions-limiting regulations, and</b>	8%
	<b>(3) Percentage covered under emissions-reporting regulations</b>	99.99%
	<b>Clarification of percentage covered under emissions-limiting and emissions-reporting regulations:</b> 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 (8% specified under IF0101-01(2) above) also report to regional and state CO <sub>2</sub> e reporting programs that are disclosed annually as part of NRG's financial reporting data (RGGI, AB32).	
<b>Discussion of accounting, estimations and uncertainty for scope 1 emissions:</b> 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	<b>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</b>	NRG anticipates reductions in its future emissions profile as the company modernizes the fleet. From 2016 to 2017, the Company's U.S. CO <sub>2</sub> e emissions decreased from 49 million metric tons to approximately 48 million metric tons, representing a 2% reduction year over year. The primary factor leading to the decreased emissions include reductions in fleet wide annual net generation due to a continued market-driven shift towards increased generation from natural gas over coal. NRG's goal is to reduce its total U.S. Scope 1, 2 (purchased electricity) and 3 (business travel) CO <sub>2</sub> e emissions by 50% by 2030, and 90% by 2050, using 2014 as a baseline.

SASB code	Accounting metric	2017		
<b>Air quality</b>				
IF0101-04	<b>Air emissions source</b>	<b>Air emissions</b> (metric tons)	<b>Percentage from production facilities within urbanized areas</b>	
	NOx	22,510	28%	
	SOx	61,430	54%	
	PM10*	3,704	45%	
	Pb**	.31	18%	
	Hg***	.15	9%	
<b>Discussion of accounting, estimations and uncertainty for air emissions:</b> *The requirement to report PM-10 emissions in annual emissions inventories or emissions statements varies between states. In addition, the earliest reporting deadline for a reporting year is April 1st of the following year. For sites in NRG's fleet that have not yet or are not required to report PM-10 emissions at the time of submittal to SASB, NRG has used USEPA's AP-42 emission factors to estimate emissions. ** In the case of lead emissions, volumes are estimated for some facilities based on prior year due to incomplete data at time of publication. ***In the case of mercury emissions, volumes are estimated for some facilities based on prior year due to incomplete data at time of publication.				
<b>Water management</b>				
IF0101-05	<b>(1) Total water withdrawn (thousands of cubic meters)</b>	~3,866,135		
	<b>2017 NRG water withdraw by source</b>			
		<b>Water source</b>	<b>Total (thousands of cubic meters)</b>	<b>Percent</b>
		Fresh water	~1,726,852	44%
		Non-fresh water	1,033,280	27%
		Ocean	1,106,003	29%
		Total	3,866,135	100%
	<b>(2) Total water consumed, (thousands of cubic meters)</b>	201,554		
	<b>Percentage of each in regions with high or extremely high baseline water stress</b>	<b>Baseline water stress high (40-80%) extremely high (&gt;80%)</b>	<b>Withdrawal from areas with high or extremely high baseline water stress</b>	<b>Consumption from areas with high or extremely high baseline water stress</b>
		Percent of total water	27%	41%
	Percent that is non-fresh*	24%	61%	
*Non-Fresh water has a total dissolved solids great than 1000 mg/l and is not used for agriculture or municipal water supply. NRG uses the World Resource Institute Aqueduct and the World Wildlife Federation Water Risk Tool to model and help assess water basin risks in combination with regional internal subject matter expertise. NRG models 123 generating locations, which are fossil fuel, renewable, nuclear and thermal facilities. The World Resource Institute Aqueduct tool identifies 55 facilities located in high (40-80%) or extremely high (>80%) baseline water stress.				
<b>Type of generating facility in baseline water stress area</b>				<b>Number</b>
Fossil fuel (natural gas, coal, oil)				21
Renewable (solar and wind)				26
Nuclear				1
Thermal (district heating and cooling)				7
Total				55

SASB code	Accounting metric	2017					
<b>Water management (continued)</b>							
IF0101-06	Number of incidents of non-compliance with water-quality and/or quantity permits, standards and regulations	21					
IF0101-07	<p><b>Discussion of water management risks:</b>                      NRG's definition of substantive risk from water is the possibility that an event will occur and significantly affect the achievement of NRG's business goals. Risk identification and assessment process applies to both direct operations and supply chain. NRG uses the measures, metrics and indicators for water risk assessment leveraging the management and professional judgment from the following perspectives:</p> <ul style="list-style-type: none"> <li>• <b>Financial impact</b> <ul style="list-style-type: none"> <li>○ Corporate earnings</li> <li>○ Capital expenditure on technologies to reduce water consumption and withdrawal</li> </ul> </li> <li>• <b>Plant operation</b> <ul style="list-style-type: none"> <li>○ Operation disruption due to water shortage</li> <li>○ Increase in costs of water usage</li> <li>○ Supply chain risk</li> </ul> </li> <li>• <b>Environmental impact</b> <ul style="list-style-type: none"> <li>○ Water availability</li> <li>○ Water quality of river basins</li> <li>○ Regulations that impact supply and/or management of water</li> </ul> </li> </ul>						
	<p><b>Discussion of strategies and practices to mitigate risks:</b>                      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 it is determined that a water supply risk exists that could impact projected generation levels within any plant within the subsequent two year time frame, risk mitigation efforts are identified and economically evaluated for implementation. Water risk regarding the impact for barge delivery is evaluated on a daily basis, with contingency plans developed as needed. NRG has long-term water contracts and agreements which mitigates risk. NRG executive management reviews modeling scenarios generated for water risk determination. Plant level NRG water usage analysis is reviewed annually by the management of NRG Operations, Engineering and Commercial Operations.</p>						
<b>Coal ash management</b>							
IF0101-08	Amount of coal combustion residuals generated (metric tons)	1,348,612					
	Percentage recycled (metric tons)	68%					
IF0101-09	Total number of coal combustion residuals impoundments	18 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					
			Less than low	Low	Significant	High	Incised**
		Satisfactory	0	8	3	0	0
		Fair	0	0	0	0	0
		Poor	0	0	0	0	0
		Unsatisfactory	0	0	0	0	0
Not applicable	0	3	0	0	3		
<p>*Powerton Former Ash Basin will be evaluated by April 17, 2018 as required by the CCR regulation which is not in scope of this report. Thus, it is not included in the table.                      **Incised is an impoundment, but not subject to assessment due to the fact they do not have a dam.                      To align with EPA reporting, we have added a column for 'Incised' and a row 'Not Applicable' to account for all impoundments as defined by the EPA.</p>							

SASB code	Accounting metric	2017		
<b>Workforce health and safety</b>				
IF0101-12	(1) Total recordable injury rate	0.57		
	(2) Fatality rate	0		
	(3) Near miss frequency rate	34.91		
<p><b>Process for classifying, recording and reporting:</b>  <math>\# \text{ of near misses reported} / \text{total hours worked} \times 1,000,000 = \text{near miss frequency rate}</math>                      The National Safety Agency defined near misses as "an unplanned event that did not result in injury, illness, or damage, but had the potential to do so." NRG utilizes an electronic Incident Management System (IMS) to document, communicate, track, and trend specific factors about each event including causal factors and corrective actions; this system provides automated fleet-wide notifications. The number of near misses was derived from a report pulled from the IMS. NRG's OHS management system applies to 100% of US operations. The system also includes notifications to executive management when significant safety events occur that meet the defined criteria for a Significant Event notification. The system also generates weekly reports to communicate previous weeks' event to NRG personnel.</p>				
<b>Nuclear safety and emergency management</b>				
IF0101-15	Total number of nuclear power units, broken down by nuclear regulatory commission action matrix column	NRG South Texas LP is a 44% owner of a joint undivided interest in STP, the other owners of STP being the City of Austin, Texas (16%) and the City Public Service Board of San Antonio (40%).		
		Reactor unit	Action matrix column	Current regulatory oversight
		South Texas 1	Regulatory response	Baseline inspection
	South Texas 2	Regulatory response	Baseline inspection	
Table source: <a href="https://www.nrc.gov/reactors/operating/oversight/actionmatrix-summary.html#r_4">https://www.nrc.gov/reactors/operating/oversight/actionmatrix-summary.html#r_4</a> as of March 2018				
IF0101-16	Discussion of efforts to manage nuclear safety and emergency preparedness	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.		
<b>Management of the Legal &amp; Regulatory Environment</b>				
IF101-21	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	<p>A discussion of risks can be found in the 2017 10-K SEC filing, Item 1-A, Risk Factors Related to NRG Energy, Inc., pages 35-52.</p> <p>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 the industry can found at <a href="http://www.nrg.com/company/energy-policy/">http://www.nrg.com/company/energy-policy/</a>.</p>		



**APPENDIX C**


## CLIMATE CHANGE PRINCIPLES

Climate change is an economic, social and environmental challenge. Addressing this challenge also creates many opportunities, as responding to climate change can unleash innovative and transformative solutions.

NRG's efforts to combat climate change are aligned with our vision to create a sustainable energy future by safely providing reliable, cleaner power that enhances people's lives and delivers value to our stakeholders. To that end, we are committed to:

- Achieving our science-based targets to reduce operational greenhouse gas emissions 50% by 2030 and 90% by 2050
- Engaging with our supply chain to reduce its carbon and water intensity by 25% by 2025
- Reporting our impact and progress using leading disclosure frameworks and standards (i.e. SASB, CDP, GRI, and TCFD)
- Advancing resilience through assessing and planning for potential climate change impacts to our business
- Deploying sustainable energy products and solutions that meet customer needs and expectations
- Ensuring our Board of Directors remain well-versed in leading climate competency and governance practices
- Engaging proactively with investors and other key stakeholders on topics such as governance or disclosure expectations

Clear policy signals can help drive private sector actions and investments in the low-carbon economy. To that end, NRG supports policies on climate change that:

- Align with the ambition of the COP 21 Paris Climate agreement
- Promote competitive, market-based solutions
- Are technology neutral
- Address economy-wide stationary and mobile sources of GHG emissions
- Provide enough long term predictability to spur private investment in innovative technologies and business models
- Complement existing voluntary corporate actions and commitments to reduce emissions from operations and supply chains 

**Learn More**

To learn more about sustainability at NRG, visit:  
[www.nrg.com/sustainability](http://www.nrg.com/sustainability)

To learn more about NRG policy positions visit:  
[www.nrg.com/company/energy-policy/](http://www.nrg.com/company/energy-policy/)



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