



+ growing sustainably

2011
CORPORATE
RESPONSIBILITY
REPORT



nrg at a glance

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A Fortune 500 company, NRG Energy is a wholesale and retail energy provider that owns and operates one of the industry's largest and most diverse generation portfolios. Our generation fleet of more than 25,000 megawatts is able to power more than 20 million homes and our retail energy operations provide electricity and other energy solutions to more than two million customers. We're leading the way in changing how people think about and use energy. For our customers, that means providing cleaner, safe, and more reliable energy choices that enhance lives, improve businesses and build a sustainable future.

For NRG's comprehensive GRI response for 2011, please visit www.nrgenergy.com/gri-index/

GENERATION



25,135*
MEGAWATTS SUPPLYING UP TO
20 million HOMES

RETAIL & THERMAL



2.1 million
RESIDENTIAL, COMMERCIAL AND
INDUSTRIAL CUSTOMERS

GENERATION



>50
LOCATIONS IN THE U.S.

RETAIL & THERMAL



16
STATES

COMPANYWIDE

At NRG, our Core Values provide a framework for all strategies, decisions and behaviors. They are the standards by which we STRIVE to conduct our daily business, work with one another and interact within our communities.

s SAFETY

t TEAMWORK

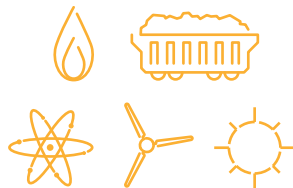
r RESPECT FOR INDIVIDUALS, CUSTOMERS,
COMMUNITIES AND THE ENVIRONMENT

i INTEGRITY

v VALUE CREATION

e EXEMPLARY LEADERSHIP

GENERATION



NATURAL GAS, COAL,
REFINED OIL PRODUCTS,
NUCLEAR, WIND, SOLAR

RETAIL & THERMAL



ELECTRICITY, RENEWABLE
SOURCE ELECTRICITY, SMART
ENERGY SOLUTIONS, DISTRICT
HEATING & COOLING, ELECTRIC
VEHICLE CHARGING

GENERATION

2,645
EMPLOYEES

RETAIL & THERMAL

2,055
EMPLOYEES

* As of December 31, 2011

5,193 employees total (generation, retail,
thermal, and other) as of December 31, 2011

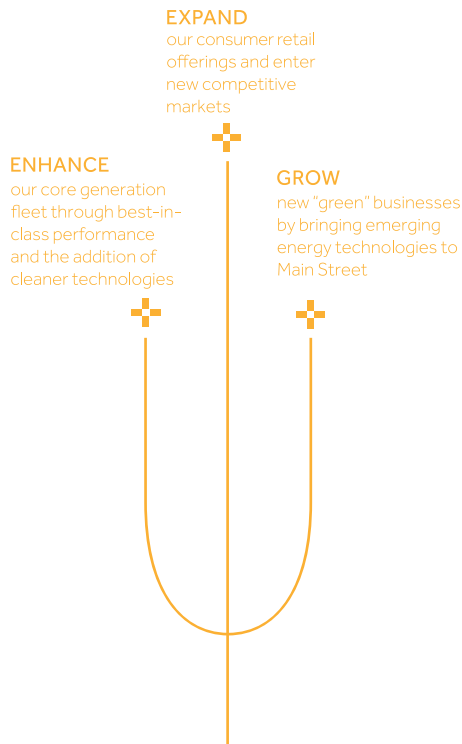


The power to change life.
The energy to make it happen.™

message from the ceo

Within this 2011 edition of our annual NRG Corporate Responsibility Report, we show our stakeholders how NRG's strategy helps create a business that is more sustainable economically, socially and environmentally. Respect for the environment, our people and our communities is a core value at NRG. Those values are serving our business well as Americans increasingly demand sustainable energy choices that are affordable, cleaner and vastly superior to "your parents' energy choices."

THREE-PRONGED STRATEGY



At NRG, we are moving the cleaner energy revolution forward by changing the way people think about and use electricity. We believe we can do the most good growing our Company, supporting our communities and stewarding the environment by offering the most innovative energy choices.

NRG's three-pronged strategy is focused on achieving growth and financial success by positioning the Company to benefit from America's trend toward demanding sustainable energy choices. The first prong—enhancing our core fleet—is an area where we focus on improving our existing model by reducing emissions, improving safety, building cleaner generation and generally reducing our footprint. The second prong—expanding our retail business—allows us to offer new solutions to customers that empower them to make more sustainable choices. The third prong—growing new green businesses—is about taking direct action to set the stage to become the new cleaner power business of the future.

We consider "green businesses" to be units through which NRG offers emerging innovative and cleaner energy products to customers. The other two legs

of our strategy are also crucial in creating a cleaner NRG and a cleaner America. We are investing heavily in repowering the traditional generation fleet that makes up NRG's core with more efficient technologies. We are also aggressively expanding the reach of the smart energy choices we offer through our retail business.

In this report, we highlight the areas of corporate responsibility most important to our stakeholders and note our progress in those critical areas. While NRG took a comprehensive reporting approach in our inaugural responsibility report—after feedback from our stakeholders and independent third parties—this year we are focused on key areas and results to show that our aspiration of being the premier energy company of the 21st century is synonymous with our aspiration of being the premier **sustainable** energy company of the 21st century.

Sincerely,

David Crane



enhanced business

One of NRG's fundamental objectives is to operate safely and reliably and maintain our electric generating assets in an environmentally protective manner. Optimizing the operating performance of our portfolio supports the needs of our many stakeholders: customers, employees, environmental organizations, our communities and shareholders.

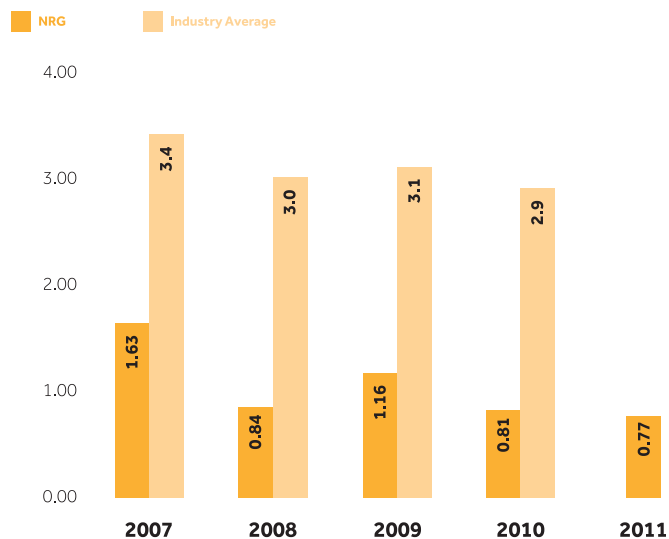
ENHANCED BUSINESS GOALS

- ❖ Provide safe, reliable energy in the markets in which we operate.
- ❖ Recruit, develop and retain the right workforce to support business growth.
- ❖ Save an additional \$150 million in costs by the end of 2012 through our *for*nrg program.
- ❖ Repower America with cleaner generation.
- ❖ Reduce the environmental footprint of existing operations through our *econ*rg program.

OUR PROGRESS IN 2011

- ❖ Achieved our all-time best rate of employee safety incidents and top-decile industry safety performance.
- ❖ Achieved a 90.3% equivalent availability factor—a key reliability metric—for our baseload fleet despite record temperatures and more frequent cycling. The results represent top decile industry performance.
- ❖ Maintained 98% start up reliability for our natural gas-fueled fleet while increasing total number of starts by 36%.
- ❖ Launched **the Quad**—an online training, talent management and internal social networking system—to improve employee engagement, training and career development opportunities.
- ❖ Exceeded the 2012 *for*nrg goal of \$150 million by \$49 million in 2011 through cost reductions, revenue enhancements and sale of non-core assets.
- ❖ Completed 200 megawatts (MW) of new peaking power in Connecticut, initiated construction in California on two new combined-cycle natural gas turbines and had 1,100 MW gross of large-scale solar projects in operation or under construction by the end of 2011.
- ❖ Moved closer to our carbon intensity goal of 0.45 metric tons of CO₂ per megawatt-hour.
- ❖ Partnered with federal, state and environmental agencies to protect about 192 threatened adult and juvenile desert tortoises while keeping construction of the Ivanpah solar project on track.
- ❖ Green Mountain Energy Company met its goal of maintaining 100% carbon neutral corporate operations. For more information about Green Mountain, see their corporate responsibility report at www.greenmountainenergysustainability.com.
- ❖ Completed installation of control equipment that will significantly reduce sulfur dioxide, nitrogen oxides, mercury, particulate matter and acid gas emissions from the coal-fueled Indian River unit 4.
- ❖ Initiated voluntarily mercury reductions at our Texas and Louisiana coal plants.
- ❖ Reduced water consumption in Texas by 86 million gallons through recycling, conserving and eliminating discretionary use.
- ❖ Began updating supplier terms and conditions to strengthen supplier diversity and corporate responsibility.
- ❖ Audited waste handling vendors to ensure compliance with regulatory requirements and made changes to enable centralized measuring, monitoring and reporting on special waste streams.

NRG AND INDUSTRY RECORDABLE INCIDENT RATES



Repowering El Segundo Generating Station.
NRG in 2011 initiated construction on two new units at our El Segundo plant near Los Angeles. These units will reduce air emissions and water use at the site.

REDUCING GREENHOUSE GAS EMISSIONS



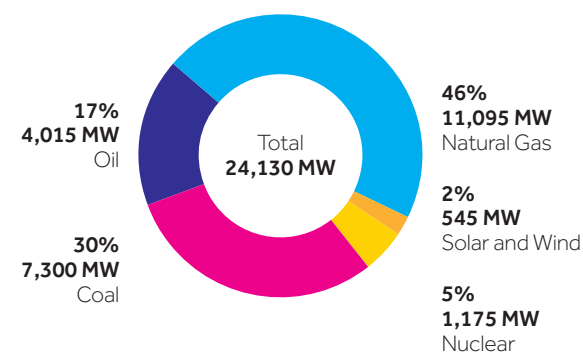
29%
DECREASE IN
CO₂ EMISSIONS
SINCE 2000

See NRG's Environmental Scorecard on page 8 for more details on our environmental performance.

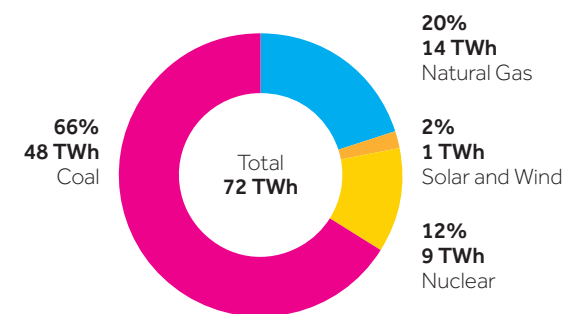
4%
DECREASE IN
CO₂ INTENSITY
SINCE 2000



2011 NRG U.S. CAPACITY BY FUEL TYPE^{1,2} (MW, %)



2011 NRG U.S. GENERATION BY FUEL TYPE^{1, 3, 4} (TWh, %)



¹ As of 12/31/11

² Excludes projects under construction

³ Coal accounts for NRG's ownership of Keystone and Conemaugh

⁴ Oil generation was 0.083 TWh

customers and communities

Sustainable practices that enhance the lives of our people and the places where we live and work are essential to the long-term success of our business. We seek to create a virtuous circle wherein we leverage our core business capabilities to provide for our customers and our communities and, in turn, benefit as their increased strength helps us grow our business.



OUR CUSTOMER AND COMMUNITY GOALS

- ✦ Expand the retail markets we serve.
- ✦ Increase the renewable energy choices we provide and sales of renewable energy to end-use customers.
- ✦ Execute a charitable giving program that supports community and economic development, education, the environment, and human welfare.
- ✦ Build NRG into a powerful consumer brand.

OUR PROGRESS IN 2011

- ✦ Acquired Energy Plus Holdings, a retail operation bringing a non-replicable set of marketing expertise and exclusive sales channels to the NRG retail family and scale in the Northeast.
- ✦ Reliant and Green Mountain Energy expanded into new competitive retail electricity markets in the Northeast.
- ✦ Green Mountain Energy was named the official "green energy provider" of Super Bowl XLVI and the 2012 NFL Pro Bowl.
- ✦ Green Mountain Energy expanded the Green Mountain Sun Club into New York. The club donates solar arrays to non-profit organizations.
- ✦ Initiated construction of two solar arrays in Haiti as part of NRG's \$1 million commitment made through the Clinton Global Initiative to demonstrate how solar power can enable Haitians to develop sustainable economic opportunities. Learn more at www.nrgenergy.com/haiti.
- ✦ Donated \$4.6 million to more than 360 community organizations, particularly in Texas, New Jersey, Louisiana and Southern California.
- ✦ Launched a branding effort including a new logo and tagline to help communicate to businesses and consumers that NRG is changing the way people think about and use energy.
- ✦ Reliant customer service awards and recognition:
 - Earned the best possible rating from the Texas Public Utility Commission based on the level of consumer complaints.
 - Won Yum! Brands Supplier of the Year award in recognition of an "extraordinary level of service."
 - Earned a 2011 Better Business Bureau Award of Distinction.
 - Received Chartwell's 2011 Best Practices Award in Utility Customer Service—Certificate of Excellence for Innovative Customer Services and 2011 Best Practices Award for Utility Marketing—Certificate of Excellence in Creativity in Implementation and Execution for e-Sense products and services and Reliant Cap-and-Save plan.

NRG CHARITABLE GIVING BY THE NUMBERS

\$4.6
MILLION
donated in 2011 to
community organizations

1,008
DONATIONS
from employees matched

362
ORGANIZATIONS
received donations



34
STATES



4
COUNTRIES

ECONRG STEWARDSHIP PROJECTS BY THE NUMBERS

- ✦ **112** community projects
- ✦ **53,000 pounds** of recycled paper purchased
- ✦ **4,000** volunteer hours for environmental projects
- ✦ **\$17,000** for environmental scholarships

BRINGING SOLAR TO HAITI NRG's Clinton Global Initiative Commitment



The power of solar in Haiti. NRG's commitment to bring the benefits of solar power to Haiti has empowered the Haitian people to develop sustainable economic opportunities, improve access to medical care, improve education and decrease hunger and malnutrition. NRG will install solar at 20 schools, two micro enterprise centers, two fish farms and a farm to power drip irrigation.



Solar arrays at the Lashto Fish Farm. Through our \$1 million commitment to Haiti made through the Clinton Global Initiative, NRG has been able to partner with CGI to connect with local Haitian businesses, aid organizations and government agencies, which has allowed the Company to maximize the impact of our contribution.

innovation

NRG believes there are three energy technologies on the verge of mass adoption that will enable a new clean energy era. These technologies are distributed solar at homes and businesses, electric vehicles, and smart energy hardware and software applications enabled by smart meters.



OUR INNOVATION GOALS

- ✦ Provide affordable solar power for homes and businesses.
- ✦ Expand our retail offerings of smart energy solutions and cleaner energy products.
- ✦ Eliminate electric vehicle range anxiety with new EV charging infrastructure.
- ✦ Find and deploy the next generation of innovative technologies.

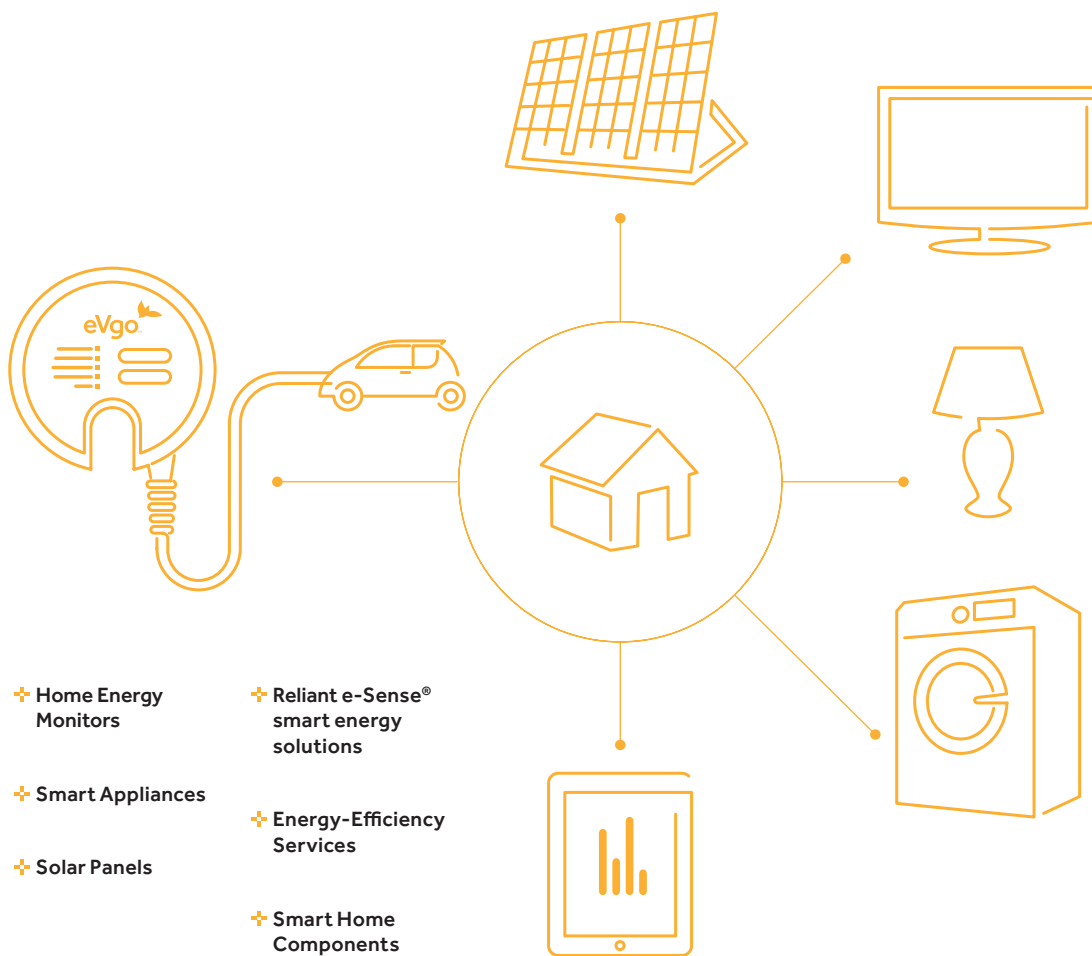
OUR PROGRESS IN 2011

- ✦ Acquired leading commercial and industrial distributed solar project developer Solar Power Partners (SPP) and its pipeline of commercial, industrial and municipal development projects.
- ✦ Announced a partnership with Prologis and Bank of America to build up to 733 MW of distributed solar at commercial facilities owned or managed by Prologis.
- ✦ Green Mountain Energy and Reliant began offering residential solar leasing programs to customers.
- ✦ Promoted awareness of green technologies by building a 2 MW solar system and 10 eVgo electric vehicle chargers at the Washington Redskins' FedExField and announced innovative renewable energy projects for 2012 at the stadiums of the New England Patriots, New York Jets, New York Giants and the Philadelphia Eagles.
- ✦ Enrolled nearly 525,000 customers by the end of 2011 in one or more of Reliant's smart energy solutions that provide customers more control, choice and convenience over how they use energy.
- ✦ Reliant launched Innovation Avenue, a community of 12 homes in Houston equipped with a customized mix of smart energy solutions, solar panels, EV chargers and more, which Reliant will monitor to determine how each technology changes the way people use energy.
- ✦ Opened the first eVgo electric vehicle fast-charging Freedom Stations in Dallas and Houston. eVgo is building a network of 120 Freedom Stations in the Dallas-Fort Worth and Houston metro areas.
- ✦ Partnered with General Electric and ConocoPhillips to form Energy Technology Ventures, collectively committing \$300 million to invest in emerging clean energy technologies.
- ✦ Formed the eV2g partnership with the University of Delaware to commercialize vehicle-to-grid technology that will allow electric vehicle owners to sell excess power from their EVs back to the grid.

connecting our customers

AN INTERNET OF THINGS

Helping our customers create an "internet of things"—essentially connecting the electronic devices in their life so that they can be managed together—is one of NRG's biggest goals. By providing customers with electric vehicle charging infrastructure, solar at homes and businesses, and smart energy solutions to manage home energy use, NRG can empower customers to use less energy and make cleaner energy choices. Below is a look at how NRG's retail businesses are connecting customers to these new energy choices, which the Company is demonstrating in the real world at 12 Houston homes on Reliant Innovation AvenueSM and on the Reliant Smarter Home on WheelsTM.



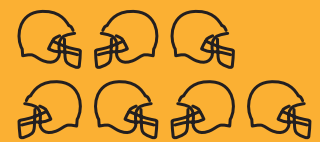
nrg and the nfl

FIELD OF CLEAN ENERGY DREAMS

NRG's innovative renewable energy systems at NFL stadiums demonstrate to a mass consumer audience that clean energy choices are here today.



4 alternative energy systems at NFL stadiums



7 deals to supply power to the NFL's seven most valuable franchises as ranked by Fortune Magazine



8.3 MEGAWATTS

wind and solar power completed or in development at NFL stadiums



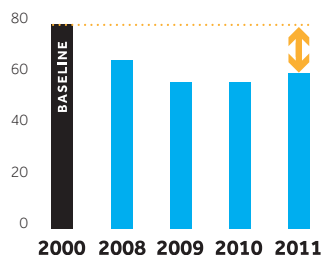
NRG completed a 2 MW solar array at the Washington Redskins' FedExField in September 2011.

environmental scorecard

climate change

- ✦ Direct greenhouse gas emissions (GHGs) down 29% since 2000.
- ✦ Two million ton increase in GHG emissions from 2010 to 2011 due to addition of power plants and high summer demand in Texas.
- ✦ 4% drop since 2000 toward CO₂ intensity goal of 0.45 metric tons/megawatt-hour (MWh) by 2025.

NRG U.S. Greenhouse Gases
(million metric tons)



29%
REDUCTION
IN CO₂
SINCE 2000

SHRINKING OUR FOOTPRINT

15,000
METRIC TONS
OF CO₂
offsets purchased
to cover business travel
and mobile equipment

12
ELECTRIC
PLUG-IN
VEHICLES
operated 1 EV
in California and
11 EVs in Texas

\$2K
REBATE
offered to employees
on their purchase of
a new qualifying
electric vehicle

1,600
METRIC TONS
OF CO₂

offset with RECs for electricity
at corporate offices in
Princeton, N.J. and Houston

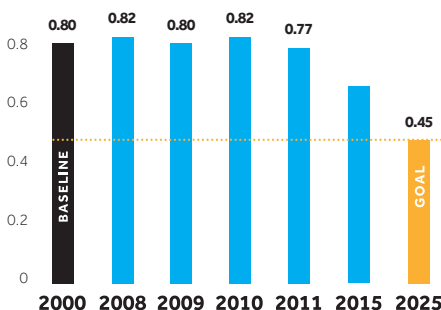
5
LEED CERTIFIED
FACILITIES

- Houston regional office (Gold)
- eVgo headquarters (Gold)
- Green Mountain Energy headquarters (Silver)
- Cottonwood administrative building (Silver)
- Houston Travis Towers (Silver)

econrg
an NRG initiative

Our econrg initiative
enables all employees
to recycle office paper,
plastic, cans and other
office waste

NRG Carbon Intensity
(metric tons/MWh)

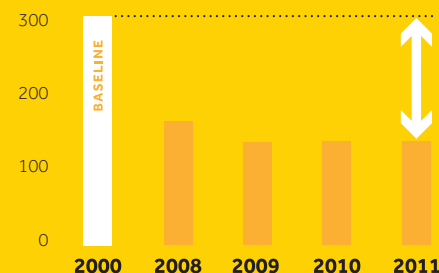


4%
INTENSITY
REDUCTION
2000-2011

air emissions

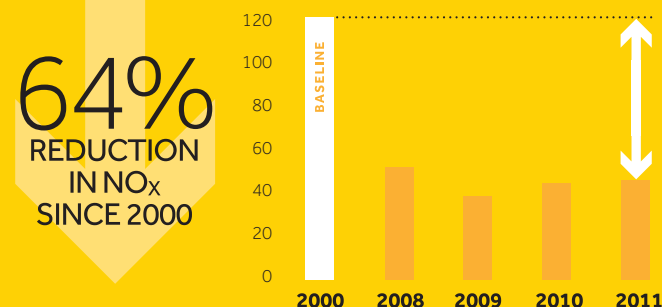
- ✦ Initiated voluntarily mercury reductions at coal plants in Louisiana and Texas.
- ✦ Completed installation of air quality controls at Indian River.

SO₂
(000s U.S. tons)



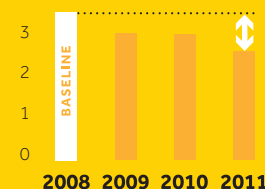
56%
REDUCTION
IN SO₂
SINCE 2000

NO_x
(000s U.S. tons)



64%
REDUCTION
IN NO_x
SINCE 2000

Mercury
(000s pounds)



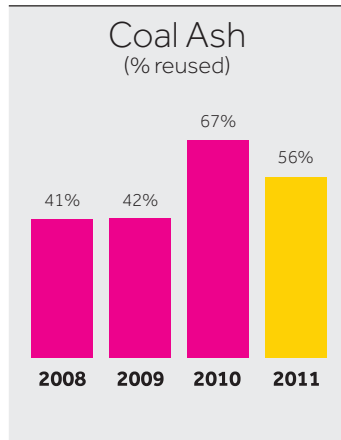
27%
REDUCTION
IN MERCURY
SINCE 2008

byproduct management

Reduce, Redeploy, Reuse, Recycle—NRG's policy is four Rs when equipment or material is no longer useful for its original purpose.

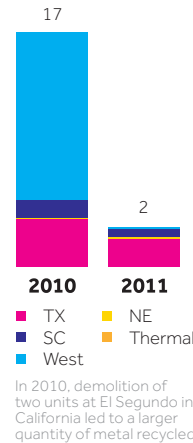
- ✦ 1.1 million tons of coal ash beneficially reused, generating more than \$4 million.
 - **Goal:**
To have more than 55% reuse annually
- ✦ Earned more than \$1.7 million through resource recovery efforts tied to equipment, material and scrap metal.

- ✦ Byproducts are reduced through facility specific waste minimization plans.
 - **Goal:**
All plants reduce hazardous waste levels to that of a small quantity generator (SQG)
 - **Progress:**
2010—64% of plants were SQG
2011—93% of plants were SQG



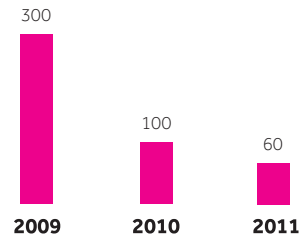
Metal Recycled

(000s U.S. tons)



E-Waste Recycled

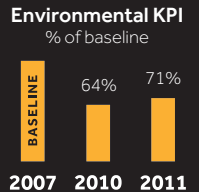
(U.S. tons)



environmental performance

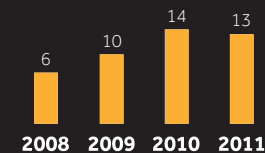
KEY PERFORMANCE INDICATORS (KPI)

- ✦ Measures performance in nine categories
- ✦ The lower the score, the better
- ✦ Each plant has max and target KPI goals
- ✦ Goal: 100% plants hit target
- ✦ Progress: 86% of plants hit target in 2011



Notices of Violation

- 13 total, all incidents with minor or no environmental impact
- ✦ Penalties totaled \$10,800
 - ✦ 7 administrative
 - ✦ 5 emissions related
 - ✦ 1 water discharge



Releases

- ✦ 4 reportable resulting in less than 15 barrels of oil released
- ✦ One reportable resulting in 45 gallons of sodium hydroxide released
- ✦ All spills cleaned up immediately by plant emergency response
- ✦ Best practices are in place to prevent spills
- ✦ All facilities conduct periodic drills to prepare for any incident

water

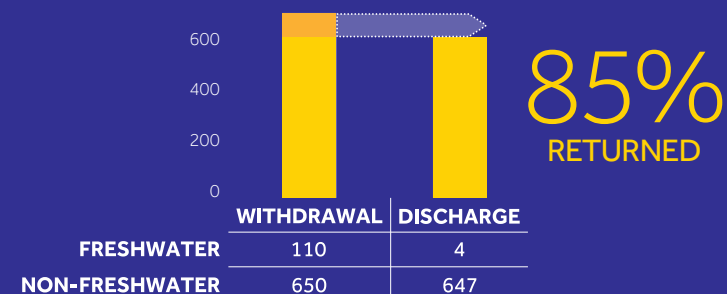
Last summer, NRG provided reliable power and implemented water use reduction measures during one of the worst heat waves and droughts in Texas history.

- ✦ Put in place water management plans to ensure that water is recycled and reused as much as economically feasible.

- ✦ Recycled wastewater streams for reuse in multiple plant systems.
- ✦ Installed low-flow plumbing fixtures.
- ✦ Inspected plants to ensure water usage optimization.
- ✦ Saved 86 million gallons of freshwater through recycling at our WA Parish and Cedar Bayou plants.

2011 Texas Water Withdrawal and Discharge

million cubic meters





NRG Energy

211 Carnegie Center
Princeton, NJ
08540-6213

t: 609.524.4500
f: 609.524.4501

nrgenergy.com