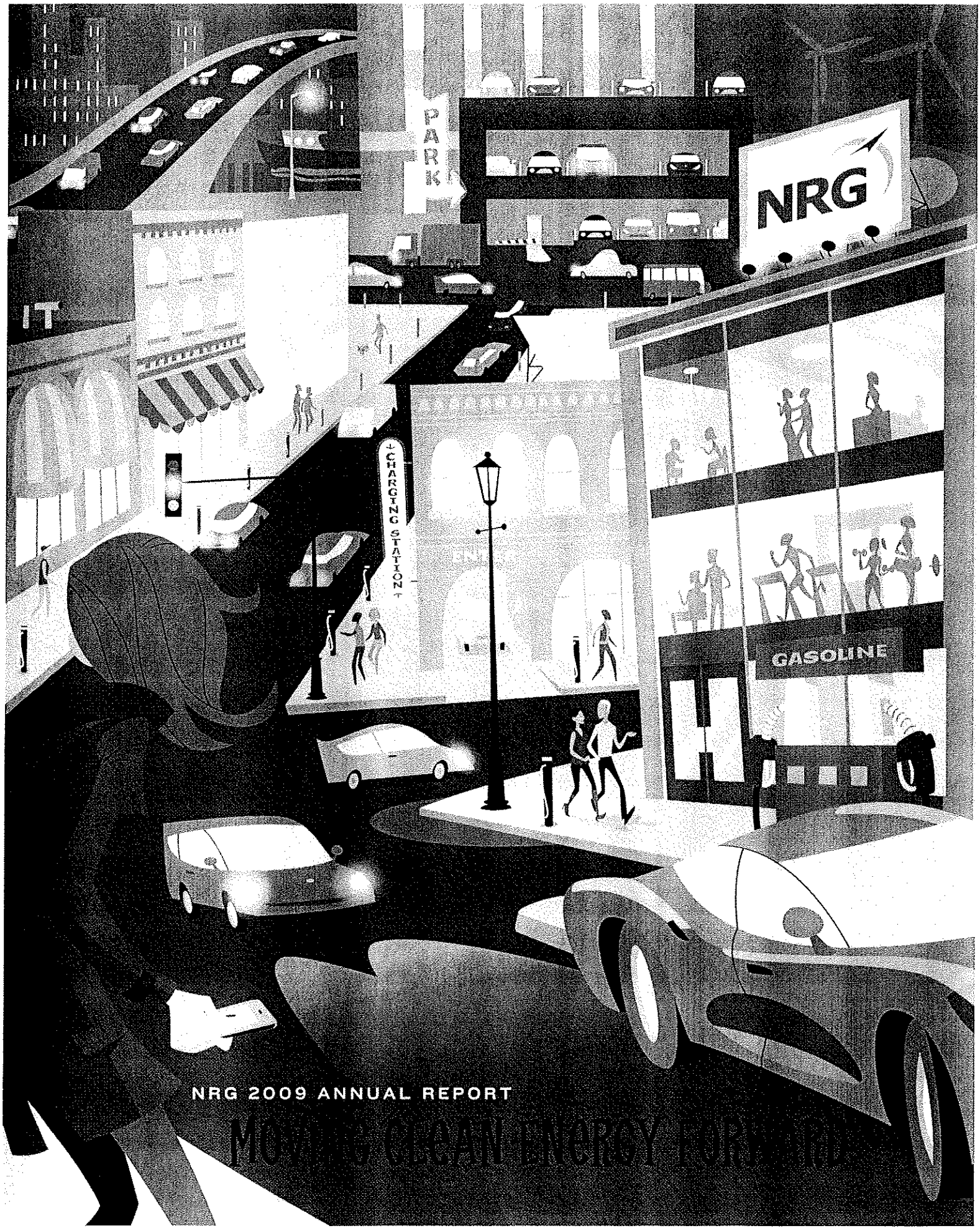
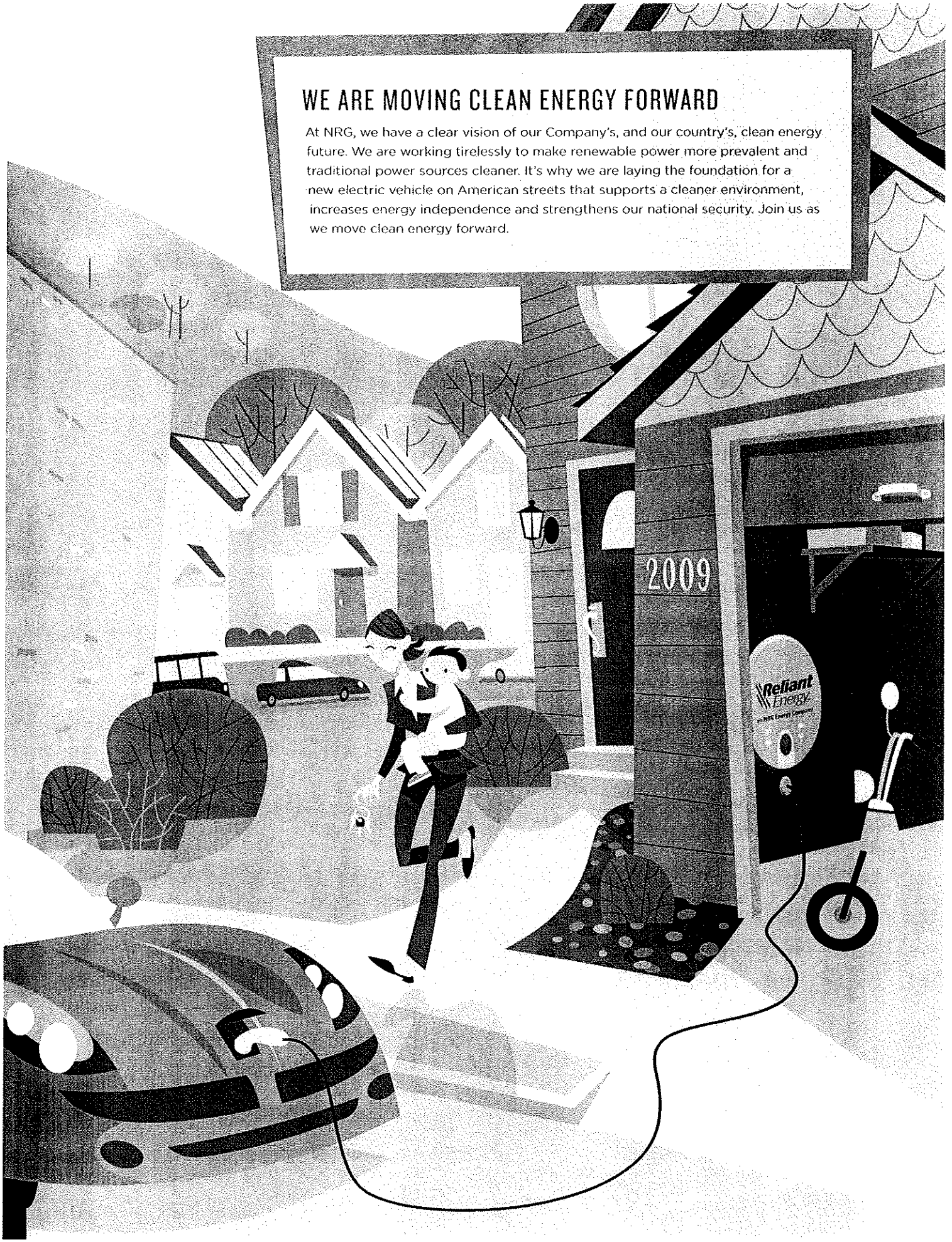


NRG 2009 ANNUAL REPORT

MOVING CLEAN ENERGY FORWARD

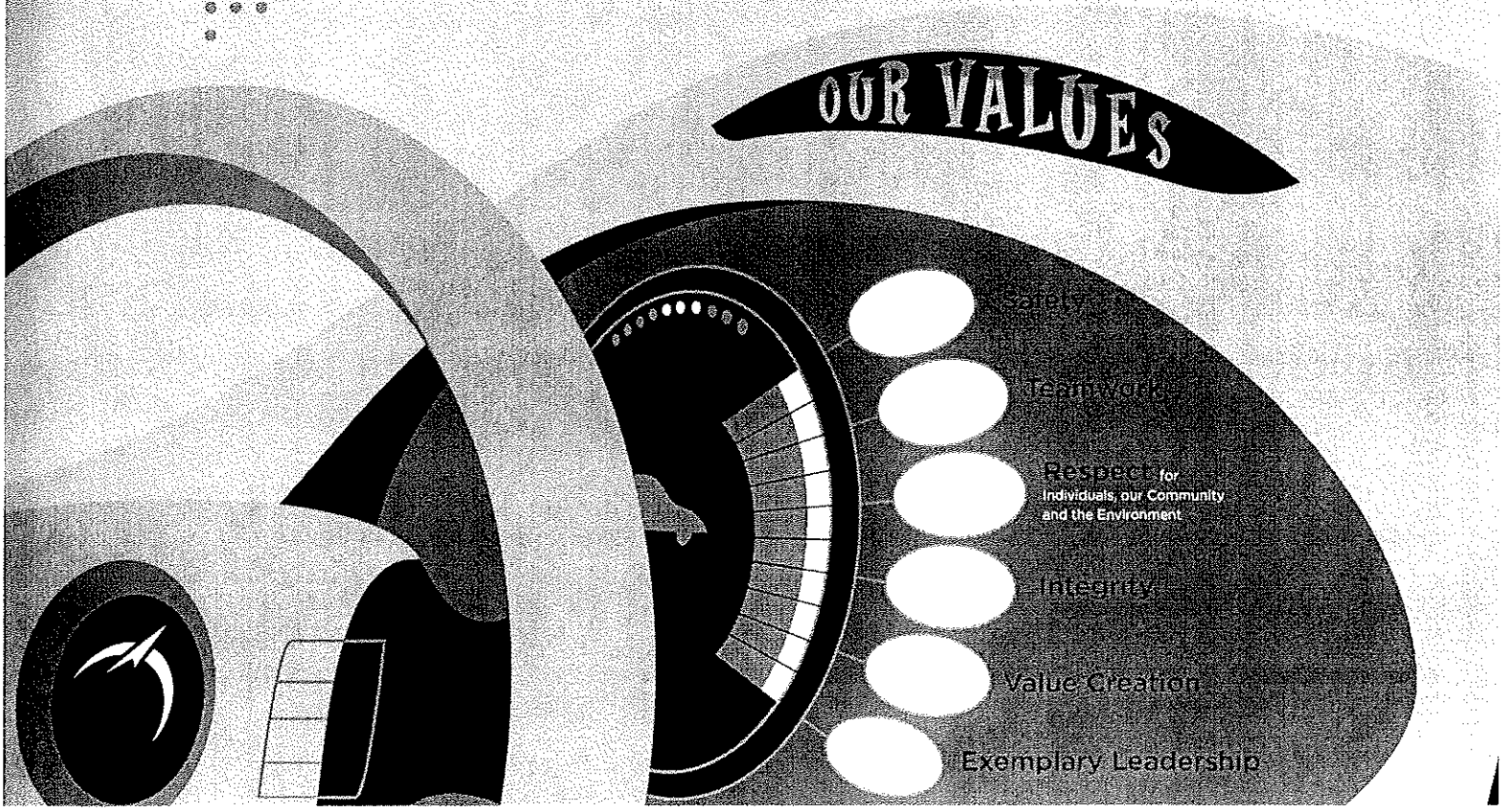
WE ARE MOVING CLEAN ENERGY FORWARD

At NRG, we have a clear vision of our Company's, and our country's, clean energy future. We are working tirelessly to make renewable power more prevalent and traditional power sources cleaner. It's why we are laying the foundation for a new electric vehicle on American streets that supports a cleaner environment, increases energy independence and strengthens our national security. Join us as we move clean energy forward.



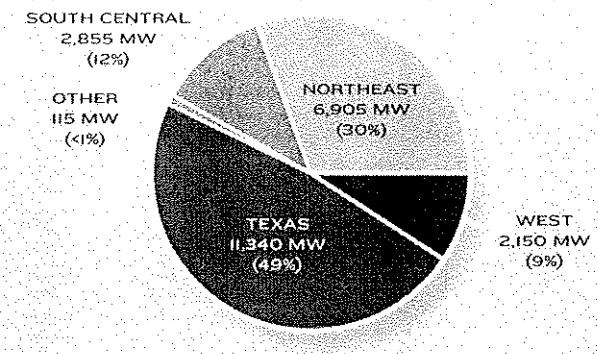
NRG AT A GLANCE

STEADY GROWTH. STRONG CASH FLOW. HIGH LIQUIDITY.

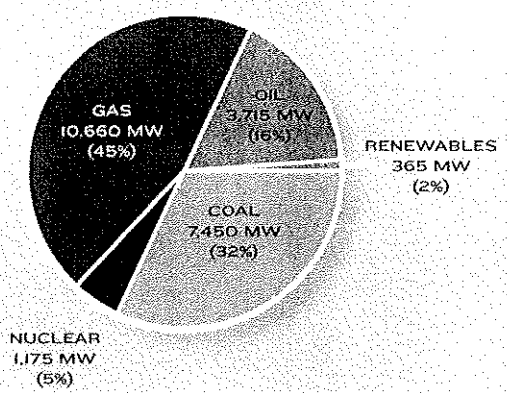


A DIVERSIFIED GENERATION PORTFOLIO

GEOGRAPHIC DISTRIBUTION OF NRG'S U.S. NET GENERATING CAPACITY

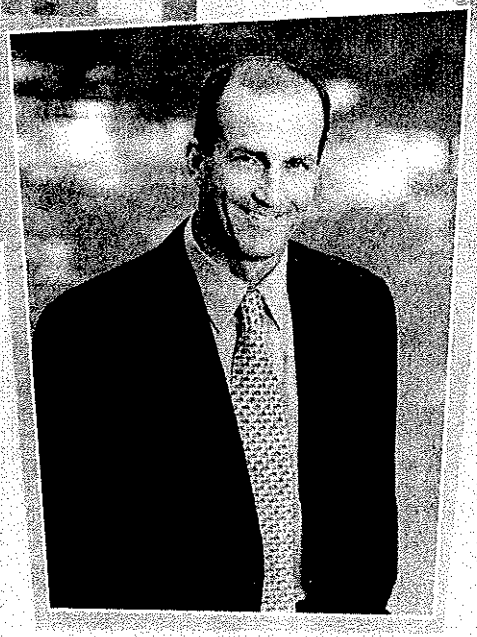


DIVERSE PORTFOLIO OF U.S. NET POWER GENERATION, BY FUEL TYPE (%)



U.S. POWER GENERATION ASSETS AS OF MARCH 31, 2010

TEXAS	LOCATION	% OWNERSHIP	NRG OWNED (NET MW)	PRIMARY FUEL
Cedar Bayou	Chambers County, TX	100.00	1,495	Natural Gas
Cedar Bayou 4	Chambers County, TX	50.00	260	Natural Gas
Elbow Creek	Howard County, TX	100.00	120	Wind
Greens Bayou	Houston, TX	100.00	760	Natural Gas
Langford	Christoval, TX	100.00	150	Wind
Limestone	Limestone County, TX	100.00	1,690	Coal
San Jacinto	LaPorte, TX	100.00	160	Natural Gas
Sherbino	Pecos County, TX	50.00	75	Wind
South Texas Project	Bay City, TX	44.00	1,175	Nuclear
SR Bertron	Deer Park, TX	100.00	765	Natural Gas
TH Wharton	Houston, TX	100.00	1,025	Natural Gas
WA Parish (coal)	Fort Bend County, TX	100.00	2,490	Coal
WA Parish (natural gas)	Fort Bend County, TX	100.00	1,175	Natural Gas
NORTHEAST	**LOCATION**	**% OWNERSHIP**	**NRG OWNED (NET MW)**	**PRIMARY FUEL**
Arthur Kill	Staten Island, NY	100.00	865	Natural Gas
Astoria Gas Turbines	Queens, NY	100.00	550	Natural Gas
Conemaugh	New Florence, PA	3.70	65	Coal
Connecticut Remote Turbines	Various CT (4 sites)	100.00	145	Oil
Devon	Milford, CT	100.00	135	Natural Gas
Dunkirk	Dunkirk, NY	100.00	530	Coal
Huntley	Tonawanda, NY	100.00	380	Coal
Indian River	Millsboro, DE	100.00	740	Coal
Keystone	Shelocta, PA	3.70	65	Coal
Middletown	Middletown, CT	100.00	770	Oil
Montville	Uncasville, CT	100.00	500	Oil
Norwalk Harbor	South Norwalk, CT	100.00	340	Oil
Oswego	Oswego, NY	100.00	1,635	Oil
Somerset	Somerset, MA	100.00	15	Oil
Vienna	Vienna, MD	100.00	170	Oil
SOUTH CENTRAL	**LOCATION**	**% OWNERSHIP**	**NRG OWNED (NET MW)**	**PRIMARY FUEL**
Bayou Cove	Jennings, LA	100.00	300	Natural Gas
Big Cajun I	New Roads, LA	100.00	430	Natural Gas
Big Cajun II	New Roads, LA	85.80	1,495	Coal
Sterlington	Sterlington, LA	100.00	175	Natural Gas
Rockford I	Rockford, IL	100.00	300	Natural Gas
Rockford II	Rockford, IL	100.00	155	Natural Gas
WESTERN	**LOCATION**	**% OWNERSHIP**	**NRG OWNED (NET MW)**	**PRIMARY FUEL**
Blythe	Blythe, CA	100.00	20	Solar
El Segundo	El Segundo, CA	100.00	670	Natural Gas
Encina (Cabrillo I)	Carlsbad, CA	100.00	965	Natural Gas
Long Beach	Long Beach, CA	100.00	260	Natural Gas
Saguaro	Henderson, NV	50.00	45	Natural Gas
San Diego Turbines (Cabrillo II)	San Diego, CA (3 sites)	100.00	190	Natural Gas
OTHER NORTH AMERICA	**LOCATION**	**% OWNERSHIP**	**NRG OWNED (NET MW)**	**PRIMARY FUEL**
Dover Energy	Dover, DE	100.00	103	Natural Gas
Paxton Creek	Paxton Creek, PA	100.00	12	Natural Gas
Total North America Net MW:	23,365 approximately			
Total Generation Net MW:	24,370 approximately			



LEADING THE CHARGE

DEAR FELLOW STOCKHOLDERS:

Like a car driver poised at the starting gate of an off-road rally, we faced an uncertain path before us at the beginning of 2009. We had to steer a course never before traveled, trying to avoid hazards that seemed to beckon at every turn and buffeted by crosswinds that threatened to send us off course. When we crossed that once-distant finish line and looked back at how far we came, our sense of gratification was made that much more powerful by the realization that, not only were we equal to the task, we grew immensely wiser and stronger as a result of the journey. We emerged energized and eager to take on what comes next.

The events of last year challenged us to defend the fundamental value of our Company with great vigor. In the process we developed a deeper appreciation both for the great promise the future holds and NRG's tremendous potential to grow and help create the clean energy economy America desires.

The theme of this year's report, Moving Clean Energy Forward, is a succinct portrayal of where NRG is heading. It's a clear strategy driven by the moral imperative to be a leader as our society begins the transition to the post-carbon economic era. Within this seismic societal change lies great opportunity for NRG. By acting as a catalyst to the creation of a sustainable economic order; by acting to enhance our national energy security by substantially reducing our dependence on foreign oil; by creating clean-power jobs driving America's high-tech future, we expect to do well for our shareholders as we do good for our customers and the world we share with them.

The financial and economic challenges of the past couple of years have created a very conducive environment for forward thinking: I believe NRG is well-positioned to seize first-mover advantage and grow into the nation's foremost provider of clean energy both as a primary and secondary energy source. This means safe, affordable nuclear and clean coal power, supported by wind and solar and fast-start, high-efficiency, gas-fueled generation connected to our factories, our homes and our cars via a smart grid technology.

I am reminded of the advice the great Wayne Gretzky reported receiving from his father: "Skate to where the puck is going, not to where it's been." Through increased cooperation and coordination between government and business, America's shift to a clean energy future is gaining momentum. By paddling hard now to catch the forefront of this wave, we believe we are establishing strong positions in essential businesses that will deliver long-term, sustainable growth to shareholders. The time for this ambitious expansion is now. If we wait for this wave to be upon us, we will miss it. We will not let that happen. We will not watch the opportunity pass us by.

RECORD RESULTS IN A DIFFICULT OPERATING ENVIRONMENT

The tremendous effort made by each of our 4,600 employees delivered record financial results in 2009. We executed at a time when our country confronted massive, historic challenges: The deepest economic contraction since the Great Depression, an unprecedented second year of electricity-demand declines, capital markets struggling to emerge from their near-death experience a year earlier and commodity prices trading at trough levels.

2009 results:

- $2,618 million in adjusted EBITDA, an increase of 14% from 2008
- $2,106 million of cash from operating activities, a 42% increase from 2008
- $941 million of net income and $3.44 per diluted common share
- $500 million of common stock, or 19.3 million shares, repurchased
- $644 million debt paid down, including $200 million of debt prepaid in 2009, with another $429 million in early 2010
- Second-safest year in our history with a 1.16 OSHA incident rate across the organization, better than the industry's top quartile level of 1.32

Through these results, again, we demonstrated that while we look toward the future, we take care of the present.

STRATEGIC PATHWAYS TO GROWTH

During 2009, we formed NRG Solar to drive our solar growth initiatives. Our expectation is for NRG Solar to become the market leader in the development, construction, financing and operations of a multi-technology portfolio of solar generation assets in North America. (see sidebar on page 6)

NRG also expanded its renewable energy portfolio through the purchase of Bluewater Wind, the leading offshore wind developer in North America and the only offshore developer with a signed long-term power purchase agreement. This acquisition is a keystone of NRG's strategy to develop renewable resources in regions where their deployment makes the most sense. We believe relying on low-carbon generation resources available locally is a better, more equitable and overall more economic approach than is relying on the creation of a high-voltage national grid.

The challenges to offshore wind in the United States are significant but they have been successfully overcome in Europe with government assistance. The first-mover opportunity for NRG in the U.S. is great and the Company's approach will be prudent as we measure our commitment to match that of the Government.

The highlight of our 2009 growth effort was the acquisition of Reliant Energy's Texas retail business, increasing and improving NRG's footprint in the third largest electricity market in the country and adding 1.6 million residential, commercial and industrial customers. We drove the efficient integration of this business into NRG and closed the transaction in 60 days, delivering $642 million in adjusted EBITDA over eight months to our bottom line. Through Reliant, NRG obtained a platform to build on the entire class of distributed generation and alternative energy technologies aimed directly at consumers. These technologies include smart meters and electric vehicle infrastructure. Reliant is an exciting new financial driver for NRG, helping us diversify our operating platform and provide a more direct connection to our ultimate customers.

TRANSFORMING THE POWER INDUSTRY

Our industry needs to think in transformative terms: How can we win market share away from other primary forms of energy? Today the automobile is the single greatest source of energy demand in this country not served by electricity. The automobile is, for most Americans, their most visceral connection both to the benefit of energy and its cost. Most Americans also realize that it is our collective dependence on gasoline—which now overwhelmingly needs to be refined from foreign oil sources—that potentially is compromising our nation's security and draining American wealth. Most Americans who live or work in our great cities also recognize the damage being done to local air quality by "tailpipe emissions" from internal combustion engine cars.

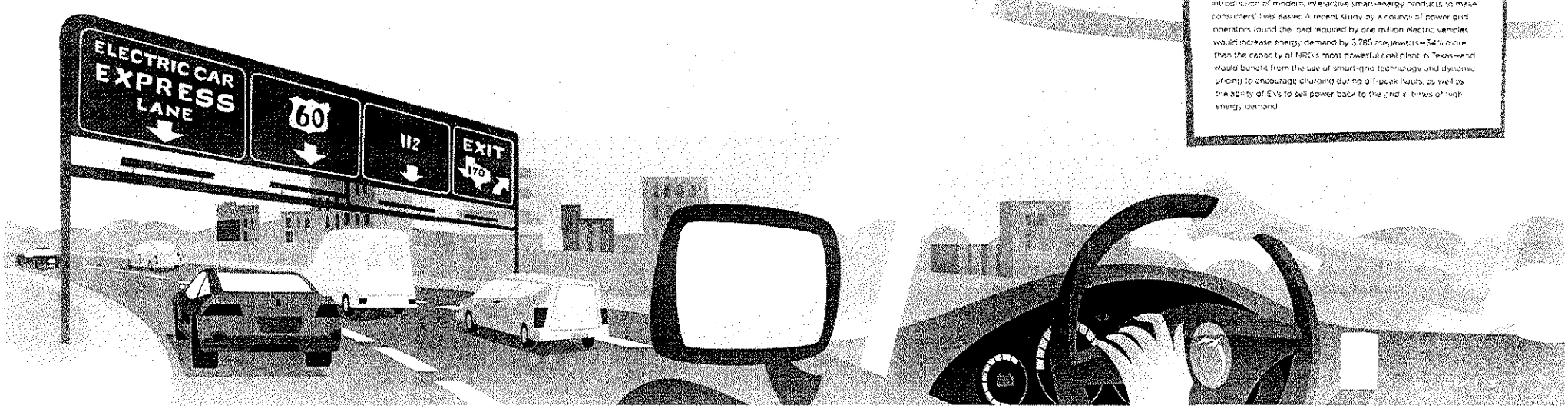
GRID TO THE GARAGE

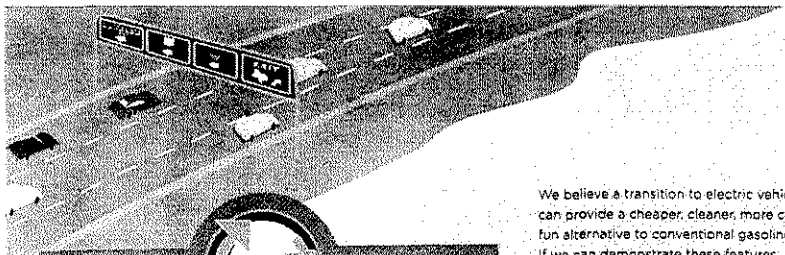
At NRG we are focused on speeding the creation of a 21st century economic strategy, rebuilding energy security and prosperity by ending dependence on foreign oil, creating clean energy jobs and driving American high-tech innovation that reduces carbon emissions. These types of paradigm shifts have happened before. In the 1930s we went from the icebox to the refrigerator. In the 1950s and 60s it was the move from radio to television. In the 1960s and after Americans switched off air conditioners rather than fans. The future for our industry is the electric vehicle.

The single greatest source of non-electric energy demand in this country is the automobile—and America's most visceral connection to their energy bill is through the vehicle's gasoline tank. Additionally, we believe people who are interested in the electric vehicle (EV) won't want it to be powered through traditional fossil generation, but through clean electricity. You complete the clean energy circle and create a virtuous clean energy lifestyle that more and more people desire. NRG sees the American garage being the vehicle service station of the future and nuclear plants being the refineries of the future.

NRG is working to promote broader adoption of the EV and the EV ecosystem through our partnership with Nissan. NRG and Nissan will work together to make Houston a launch city for their efforts, advocating for policies that make it easy for consumers to make the switch from gasoline to EVs and will work together to establish the infrastructure of charging stations needed to support a critical mass of EVs. While initial efforts will focus on the Houston region, Reliant and Nissan will also address the challenge of establishing the infrastructure, policies and services to support electric vehicle owners across Texas.

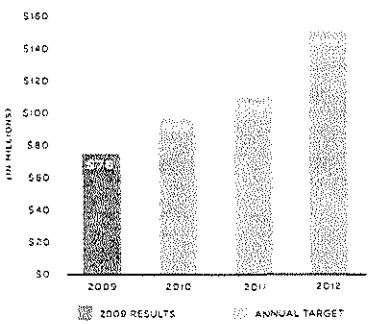
The EV makes sense for our industry and will help speed the introduction of models, interactive smart-energy products to make consumers' lives easier. A recent study by a council of power grid operators found the load required by one million electric vehicles would increase energy demand by 3,785 megawatts—34% more than the capacity of NRG's most powerful coal plant in Texas—and would benefit from the use of smart-grid technology and dynamic pricing to encourage charging during off-peak hours, as well as the ability of EVs to sell power back to the grid in times of high energy demand.





DRIVING RETURNS

ADDING VALUE, INCREASING PROFITABILITY, IMPROVING EFFICIENCY



Doubling down on the success of NRG's Focus on Return on Invested Capital (ROIC), FORNRG—which contributed $258 million to operating income from 2005–2008—the Company initiated the FORNRG 2.0 program in 2009. The program focuses on projects that impact ROIC by leading to enhanced revenues, saving on costs, and optimizing assets through better use of inventory, real estate and other asset categories.

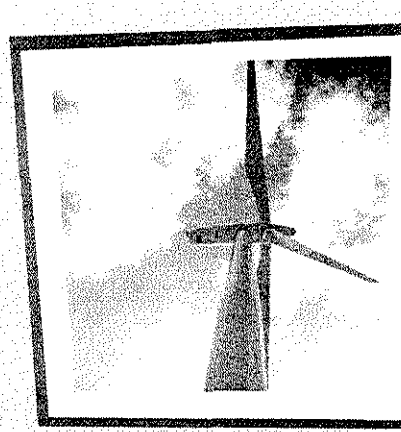
The FORNRG 2.0 program is off to a very fast start. The goal is to achieve a 1% improvement in ROIC by 2012, representing an increase in cash flow of about $150 million. To achieve this, NRG must capture the results of initiatives and projects that are focused on enhancing revenue, cost reduction or asset management. At the end of 2009, FORNRG 2.0 delivered results that more than doubled the target for the year, adding $70 million in cash flow. Due to FORNRG 2.0's strong performance in 2009, we increased our 2010 goal to $90 million in cash flow.

We believe a transition to electric vehicles is inevitable if EVs can provide a cheaper, cleaner, more convenient and more fun alternative to conventional gasoline-powered vehicles. If we can demonstrate these features, a transition to EVs is inevitable. That transition holds the promise of increasing our national energy security, reducing our massive energy payments to foreign sources and improving the air quality in our congested urban areas. We believe it is inevitable that such a transition will receive full and bipartisan support from our public policymakers.

For us, the electric car is the cornerstone of the 21st century power industry; it will increase demand, level out daily consumption, and ultimately serve as our primary source of distributed electricity storage. By aligning new, emissions-free power generation plants, like baseload nuclear and clean coal plants, plus renewables to fuel a fleet of electric vehicles, we can offer the virtuous zero-carbon lifestyle more and more Americans crave.

As a power generator, we can profit from the so-called "park spread," the difference between the price of gasoline put through an internal combustion engine, expressed in cents per mile driven, and the price of natural gas sold in the form of electricity and converted into miles driven by an electric vehicle. The increase in electricity demand as a result of electric vehicles will push up demand in off-peak hours and low-demand valleys during the day, smoothing the load curve and benefitting baseload generators like ourselves.

In 2010 and 2011, our objective is to build out an electric vehicle transportation ecosystem in Houston. Building on our consumer interface through Reliant, we will work closely with electric car providers like Nissan Motor Co., which will introduce its all-electric LEAF later this year across the country at an affordable price point. The LEAF leads an expanded range of electric car choices available to American consumers, including Aptera, Chevy Volt, CODA, Fisker and Tesla. The faster these vehicles are embraced by the American public, the more quickly the electric vehicle infrastructure will be built out and product offerings will be expanded.

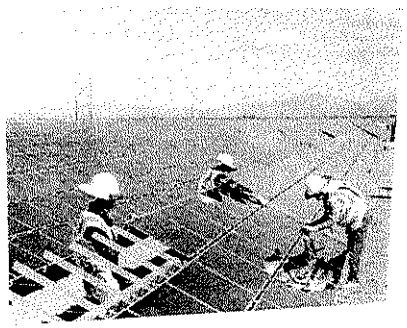


WIND AT OUR BACKS

NRG expanded the scope of its renewable energy portfolio through the purchase of Bluewater Wind, an important component of NRG's strategy of developing a regional renewables portfolio to match clean energy projects to an area's unique geographic characteristics. One of the best wind resources in the country is located just 10 miles off the Eastern Seaboard, near major population centers, and is the Northeast's main indigenous renewable resource. NRG Bluewater Wind has a 225 megawatt power purchase agreement with Delmarva Power & Light, and is pursuing offshore wind development projects in other parts of the region to give NRG first-mover advantage in this blossoming renewables market.

The introduction of the electric vehicle is transformational not only in the commercialization of a form of emissions-free transportation, but also in its fundamental requirement that the parallel energy systems of this country—the national electrical grid and road transportation—be bridged. That "bridge" will be the electric outlet in your garage, thus not only reducing dramatically your refueling costs but virtually eliminating the inconvenience of service station visits. Indeed, your garage will be the service station of the future.

Our partnership in the national Electrification Coalition, a group of businesses seeking to promote the deployment of the electric car, provides a great road map to our electric car future. Its approach is to create a foothold strategy whereby a concerted effort would be made to build electric vehicle critical mass in select first-adopter cities, and from there, expand into surrounding regions and nearby cities. The Coalition is pushing for the rollout of the electric vehicle ecosystem as soon as possible, with one million vehicles in target cities over the next few years. Much work remains to be done, but the benefits of the electric vehicle, not only to NRG, but to America's energy security, national wealth and environment, are clear.



LIGHTING THE WAY WITH NRG SOLAR

Our NRG Solar initiative already is showing strong results through the purchase of California's largest contracted solar photovoltaic project, the 20-megawatt Blythe power plant east of Los Angeles. Electricity generated from Blythe is being sold under a 20-year power purchase agreement. Additionally, we are focused on developing large-scale solar thermal projects in California and the U.S. Southwest. The combination of photovoltaic and solar thermal projects gives NRG the platform to lead the industry in the commercial implementation of solar technologies.

DRIVING RESULTS IN A MARKET ENVIRONMENT SHAPED BY WASHINGTON

Let me close by commenting on the political environment in which your Company operates. While we used to call ourselves an "unregulated" power company to distinguish ourselves from rate-based utilities, the label is, and always was, a misnomer because our business operations always have been heavily regulated with respect to health, safety, and environmental protection. We have worked hard to establish a record of compliance, improvement and even innovation in these fundamental areas in respect of which the owners in NRG should be proud.

But over the past six years, the road to opportunity in our industry has increasingly passed through Washington. Whether we speak of the nuclear renaissance, as catalyzed by the Energy Policy Act of 2005, the explosive growth of wind and other non-wind renewables as incented by federal tax credits and partially funded by the economic stimulus package, or the yet-to-be legislated inducements to the creation of electric car ecosystems, Washington is "driving the bus" for the energy sector in a way unparalleled in the history of the American energy industry.

As a Company which is striving to capture first-mover advantage in these areas, it is important for us to have a voice in how that bus is driven. As a result, over the past six years, I have spent an ever-increasing amount of time in Washington and in the state capitals where we do business. And during that time, I have sought out discussions with any elected official, of either party, interested in a constructive dialogue on national energy policy.

I am concerned that the debate on national energy policy, rather than the regional give-and-take that it has traditionally been in Washington, is sliding into the maw of unthinking partisanship that has swallowed so many other pressing national issues over the previous months and years. This is a worrisome trend because we are counting on the fact, insofar as national energy policy is concerned, that our public policy makers would rather make a difference than score a political point.

For our part, we will continue to try to make a difference—in nuclear, in renewables and in electric car ecosystems.

For my part, as your CEO, I believe in the business opportunities that abound in the new energy trends that currently are gathering force to engulf the world economy.

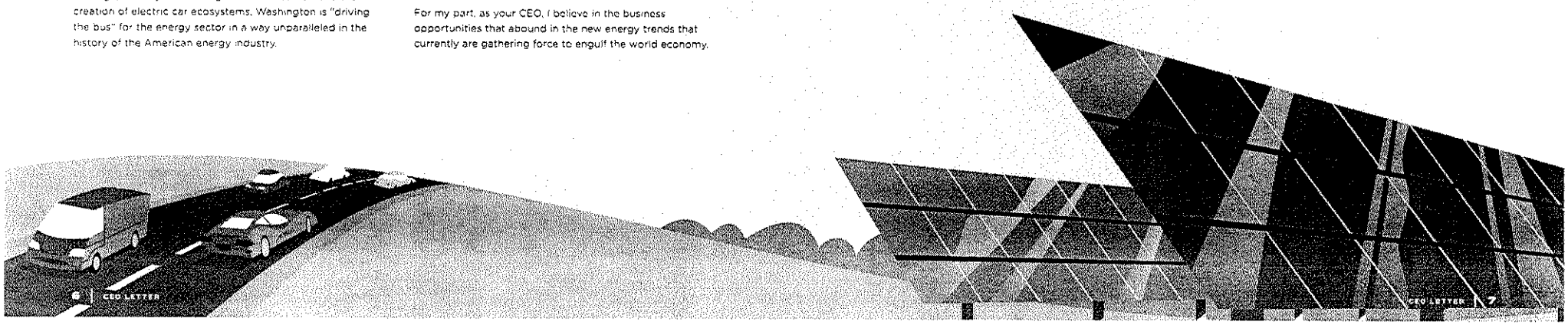
As an American, I believe in American greatness and that our dependence on foreign oil is the Achilles' heel to sustaining our greatness as a nation.

As a father of five, I believe it is my responsibility to pass on to my children a world that is cleaner, safer and healthier than the world we inherited from our predecessors.

As a rational, thinking person, I believe that none of the foregoing objectives are in conflict with each other—indeed, they are mutually enhancing—and working together we can make a point by making a difference.

Where NRG now stands—independent, forward-leaning, with an everyday focus on driving performance and value to stockholders from traditional wholesale power generation to distributed clean energy solutions—is a testament to the outstanding work by our leadership team and all our employees. Sincere thanks also goes to our Board of Directors, who remain committed to NRG's growth program and are an invaluable source of strength and strategic guidance.

To my fellow stockholders, thank you for your staunch support amid the tumult of last year. All of us at NRG value your commitment to our ambitious clean energy growth strategy. Together, we move forward.

Sincerely yours,

David Crane
President & Chief Executive Officer
March 31, 2010