



## Presentation to Delaware Renewable Energy Task Force

Gregory Lennon | Developer | Northeast Region

November 16, 2010

This Presentation contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are subject to certain risks, uncertainties and assumptions and typically can be identified by the use of words such as “expect,” “estimate,” “should,” “anticipate,” “forecast,” “plan,” “guidance,” “believe,” “will” and similar terms. Such forward-looking statements include information relating to NRG Solar, an NRG Company, and NRG’s solar development strategy and projects. Although NRG believes that these expectations are reasonable, it can give no assurance that these expectations will prove to have been correct, and actual results may vary materially. Factors that could cause actual results to differ materially from those contemplated above include, among others, general economic conditions, hazards customary in the power industry, weather conditions, construction delays, 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 regulation of markets and of environmental emissions, the condition of capital markets generally, and the inability to implement value enhancing improvements to plant operations and companywide processes.

NRG undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. The foregoing review of factors that could cause actual results to differ materially from those contemplated in the forward-looking statements included in this Presentation should be considered in connection with information regarding risks and uncertainties that may affect NRG's future results included in NRG's filings with the Securities and Exchange Commission at [www.sec.gov](http://www.sec.gov) .



# Company Overview



Added to the S&P 500 Index (2010)

Fortune 500– Ranked 12<sup>th</sup> Fastest Growing Company (2009)

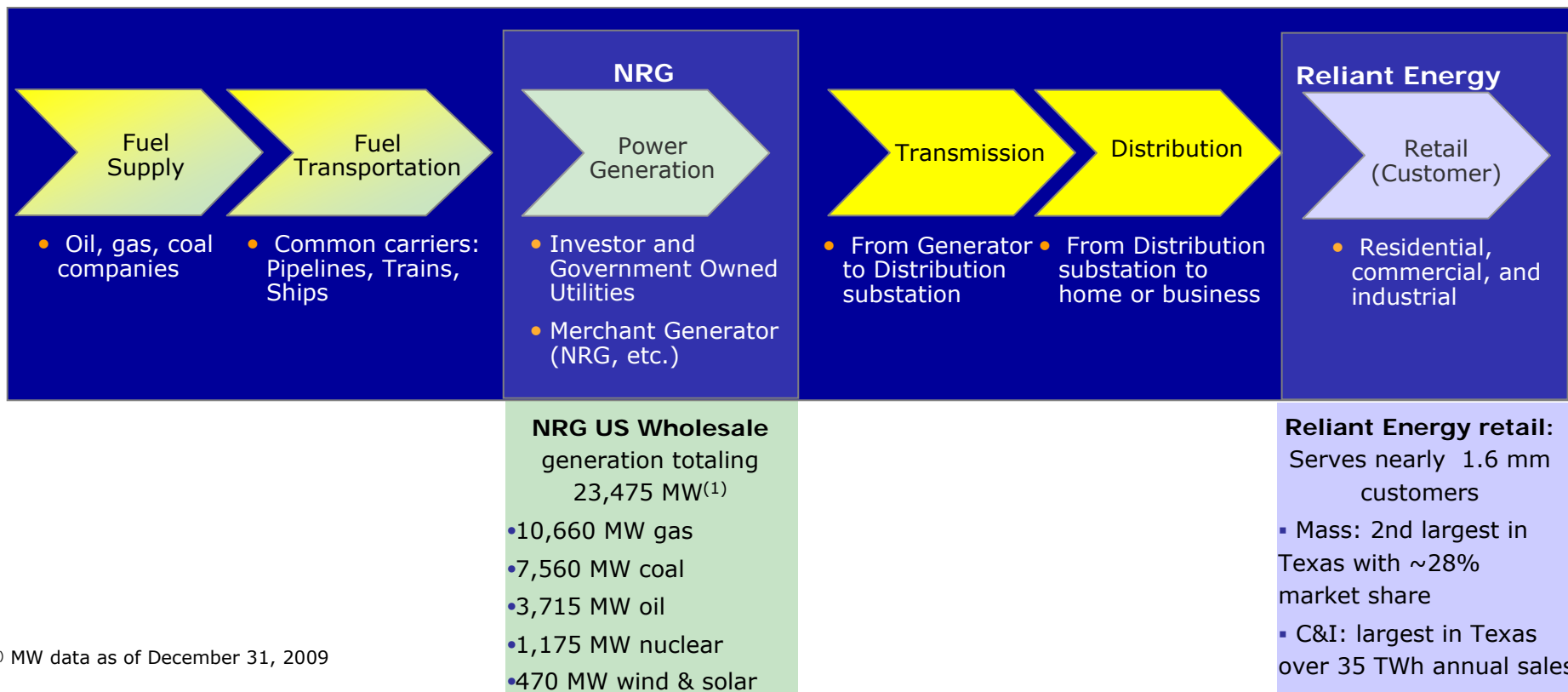
Fortune 500– Ranked in top 10% for “Best Investment” (2008)

Platt’s 2007 Recipient of Energy Company and Industry Leader of the Year

Listed: **NYSE (NRG)**; Market Cap.: ~\$5 billion; Employees: ~4,500

Generating Assets: ~24,000 MW, primarily in four domestic regions

## NRG: The center of the power industry value chain



<sup>(1)</sup> MW data as of December 31, 2009

# NRG's Low/No Carbon Lineup

Committed to Development of New Generation Facilities



## SOLAR

- Up to 1,600MW of PV & concentrated solar power – under development
- Evaluating numerous solar photovoltaic opportunities
- Commissioned 21 MW largest utility-scale pv solar project in CA in Dec '09

## WIND POWER

- NRG's land-based wind portfolio operates 470 MW in Texas
- NRG Bluewater Wind is actively developing offshore wind projects in DE, NJ, MD and NY

## NUCLEAR

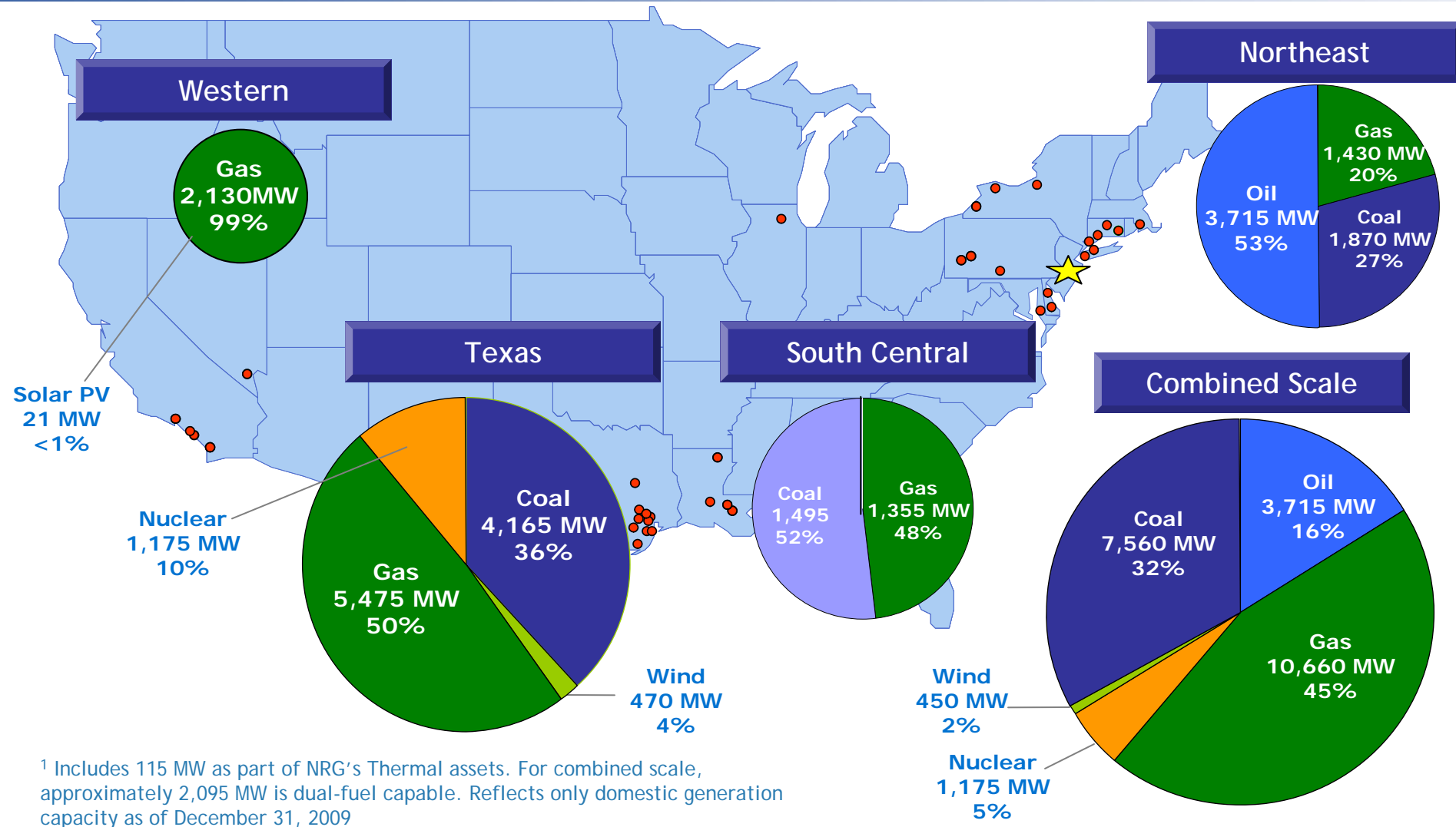
- Nuclear partnership with Toshiba formed to bring proven advanced nuclear to America
- First effort is at South Texas Project for two nuclear generating plants capable of providing enough carbon free power for 2 million homes

## BIOMASS

- Montville, CT - Developing project to repower Unit 5 to produce 40 MW with open loop biomass
- Developing fleet wide opportunities for co-firing – Dunkirk, Montville, Big Cajun & others
- Pilot project to evaluate local switchgrass and high-biomass sorghum at Big Cajun II

## ALTERNATIVES

- Plasma gasification - torches break down solid fuel (i.e. MSW) into its molecular structures to form synthetic gas; similar emissions profile to IGCC
- NRG was awarded a \$167 million grant from the U.S. DOE for a post-combustion carbon capture demonstration project at W.A. Parish (Texas)

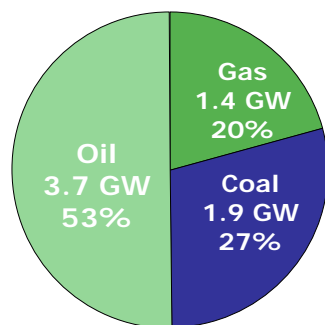


Asset scale & diversity of fuel and location provide value creation opportunities

# Northeast Region Overview



- 2nd largest region in NRG by total MWs
- Largest geographic region comprised of three ISO/RTOs - (ISO-NE, NYISO & PJM)
- Princeton, New Jersey – Site of corporate office
- Asbury Park Press, Freehold NJ – 2 MW “behind the fence”



Plant	Location	% owned	Net generation capacity (MW)	Primary fuel-type
Oswego	Oswego, NY	100.0%	1,635	Oil
Arthur Kill	Staten Island, NY	100.0%	865	Natural gas
Middletown	Middletown, CT	100.0%	770	Oil
Indian River	Millsboro, DE	100.0%	740	Coal
Astoria Gas Turbines	Queens, NY	100.0%	550	Natural gas
Dunkirk	Dunkirk, NY	100.0%	530	Coal
Montville	Uncasville, CT	100.0%	500	Oil
Huntley	Tonawanda, NY	100.0%	380	Coal
Norwalk Harbor	So. Norwalk, CT	100.0%	340	Oil
Vienna	Vienna, MD	100.0%	170	Oil
Connecticut Remote Turbines	Four locations in CT	100.0%	145	Oil
Devon	Milford, CT	100.0%	140	Natural gas
Somerset Power	Somerset, MA	100.0%	125	Coal
Conemaugh	New Florence, PA	3.7%	65	Coal
Keystone	Shelocta, PA	3.7%	65	Coal
Total Northeast Region			7,020	

(1) MW data as of December 31, 2009

7,020 MW located in Connecticut, Massachusetts, New York, Delaware, Maryland, and Pennsylvania

# NRG "Greenest": Solar Development Pipeline



Project	Location	MW	PPA	Expected COD	Status
Blythe	Blythe, CA	21 MW	20-year	12/2009	Operating
Avenal	Kings County, CA	22.5 MW (net)	20-year	Mid 2011	Under Construction
Ivanpah	Ivanpah, CA	40-60% of 392 MW	20-25 year	2012-2013	Under Construction
Roadrunner	Santa Teresa, NM	20 MW	20 year	Late 2011	Pre-Construction
2010 Projects to Close	CA	Up to 550 MW	25 year	2011-2013	Pre-Construction
Advanced pipeline	CA, NM, NV	Up to 1000 MW	Yes	2011 to 2014	Permitting/ Approved/ Proposed

Advanced development pipeline – very close to fruition <sup>7</sup>

# Clinton Global Initiative - Haiti



NRG partnered with Solar Electric Light Fund (SELF) in support of the Clinton Global Initiative

NRG's \$1 million commitment will fund the project, *The Sun Lights the Way: Brightening Boucan Carré*,

Providing clean, safe and inexpensive electric power for the following:

- Fish farming

- Water pumps for irrigation & drinking water

- Street lights

- Schools

- Micro-enterprise centers

Create a model that can be replicated in other areas of the country

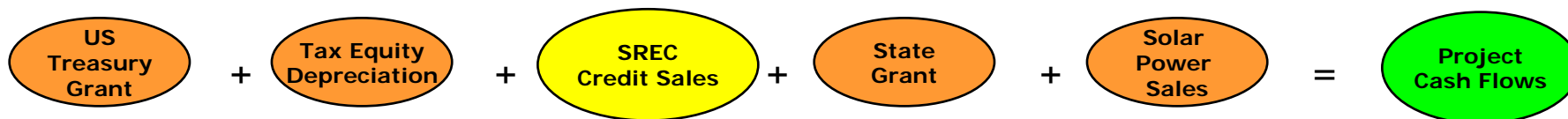
Solar to enhance health, education & economic well being <sup>8</sup>



# Regulatory & Policy Impact to Solar Project Returns



REVENUE TYPE / SOURCE	DESCRIPTION	POLICY / MARKET TRENDS (2010)
<b>US Treasury Grant</b> (in lieu of ITC)	30% of total costs paid from US Treasury within 60 days of commissioning. (Must be Under Construction by Y/E 2010)	S2899 (Feinstein/Merkley) legislation looks to extend Treasury Grant for 2 years. Several other proposals to do the same. Any/all will compete to be tacked onto American Power Act.
<b>Tax Equity Incentive</b> (income loss cash flow)	Distributed tax advantage to investors from depreciation (+ITC where in lieu of grant). delivers positive cash flows with income losses during life of fund.	Several industry/lobby groups are pressing for an extension of bonus depreciation, which would have a +200-300 MW impact to US installs.
<b>SREC – Credit Sales</b> (energy attribute commodity)	Projects seek to generate credits per MWh produced with aggregators & utilities under long term contracts.	Federal RPS would create a nationwide SREC marketplace. Current state SACP –DC (\$500); DE (\$235); MD (\$400); NJ (\$675); PA (\$550). Spot and long term contracts vary off SACP.
<b>State Solar Grant</b> (additive to Federal grant)	DC, MD, VA, DE and PA offer(ed) cash grants equivalent to 10-25% of project costs.	Many programs under budgetary pressure DE Renewable Energy Task Force New DE RPS legislation
<b>Power Purchase Sales</b> (micro-utility revenues)	Creditworthy rooftop hosts contracts to purchase 100% of solar electricity generated by project for 15-25 years.	Panel efficiency and cost trends drive net output (revenues). Rate trends drive quotes.



Solar in the Northeast is driven by incentives

# Distributed Solar Focus

## Key Attributes

1. Roof Structure - ready to support load bearing weight above snow loading per local building codes
2. Roof Age – ideally <5 years with sufficient warranty coverage due to impact on operations of plant
3. Roof Warranty – terms & time period cover the use in particular application
4. Owner Occupied – reduce negotiations of risk mitigation of businesses located below roof
5. PJM Interconnection – Avoid time delays with application review (Southern NJ has delays of 3-4 mos. in addition to PJM review time)
6. Building or site not subject to historical codes
7. Shading – Appropriate distance from taller surrounding structures

## Why Distributed in the Northeast?

1. Maximize “under-utilized” space first
2. No Grid Interconnection costs
3. No project delays due to review of interconnection applications
4. No transmission losses with onsite use
5. Avoidance of “Land Use” committees
6. Local sourced “peak” energy
7. Minimize grid impact & concerns on reliability
8. Net metering during non-core work days

## NRG Solar Roof or Car Port

- Princeton Hospital – 250 kW parking stanchions
- Arizona Public Schools
  1. On site parking lot & playground cover
  2. 20 Year PPA
  3. Part of 30 MW school/government sites

## What can NRG do for you?

1. Scale & breadth of capabilities – technology agnostic to provide best solution for your renewable energy needs
2. Strong financial performance & investment grade credit rating for confidence in long term supply & O&M maintenance
3. Long Term SREC Contracts - lock in SREC prices. SRECs will continue to trade near SACP in the spot market, as long as shortfall continues and near term purchases pay SREC premium.
4. Long Term Power & Energy Capacity Contracts – lock in energy and capacity prices for long term, strategic budget planning
5. Distributed Solar – Onsite roof tops & car port. Additional layer provides direct shading
6. Utility Scale – Delaware land (Dover & Dagsboro) ready with capability for off-site solar production to provide only SRECs as needed

## Recommendations for Delaware

1. Long term contracts – larger projects will require project financing
2. SREC floor price for 15 year period or greater – offset multiplier expiration 12/31/14
3. Higher SACP – Ensure stronger market signal leading to greater competition
4. Ensure greater transparency to establish better market SREC pricing
  - Modify Individual SACP to broader standardization
  - Set SACP price through 2025-2026
5. Net Metering – apply to all entities & increase all limits to 2 MW non-residential
  - Subject to customer's electricity requirements
  - Virtual Net Metering – (PA regulation) enable multiple sites to aggregate
  - Townhouse & Condo Associations – significant roof space, individual meters
  - Schools – perfect structure for net metering & peaking needs M-F thereby allowing for long term budget planning

# Thank You



Greg Lennon  
NRG Energy, Inc  
609-524-5118  
greg.lennon@nrgenergy.com

Steven Arabia  
NRG Energy, Inc  
240-620-4441  
steven.arabia@nrgenergy.com