INVESTOR MEETING 2015

# NRG Carbon 360<sup>SM</sup> Overview

### John Ragan | President NRG Carbon 360



### NRG Carbon 360: Why?

Society, led by the Millennials, increasingly focused on carbon footprint of its consumptions

> EPA will not relent in its efforts to regulate greenhouse gases

Abundant US coal resource cannot be disregarded-reinforces NRG's fuel diversity advantage

> NRG has a phenomenal, first-mover, competitive advantage to advance this opportunity



1

## **Double Value**



### Value to NRG Group

- Enhances value and useful life of flagship coal fleet
- Provides unique and effective carbon hedge
- Preserves fuel diversity



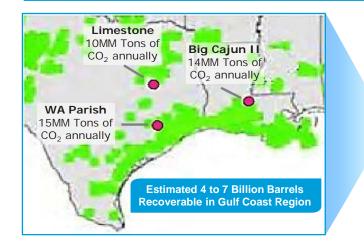
- Capitalizes on abundant Gulf Coast EOR resources
- Captures significant value from existing assets
- Contributes to significant EBITDA growth



### ★ More Than Just a Barrel of Oil ★

## Unique Advantage: Leveraging NRG's Coal Assets





- NRG's Gulf Coast assets provide a unique opportunity for future development projects:
  - WA Parish
  - Limestone
  - Big Cajun 2





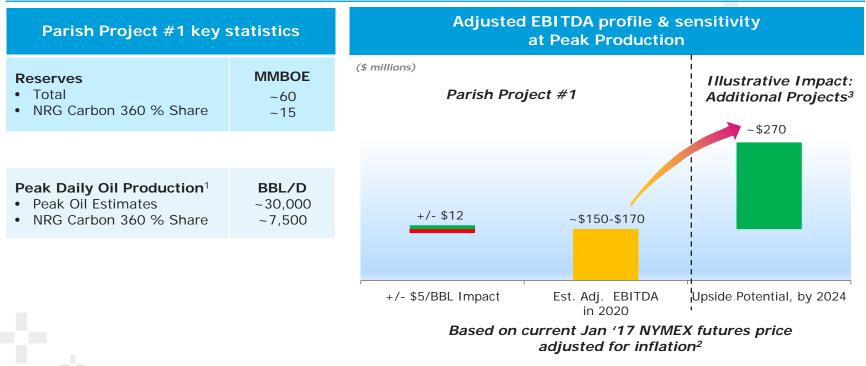




Represents one of the largest equity CO<sub>2</sub> positions in U.S.



## NRG Carbon 360: Economic Potential



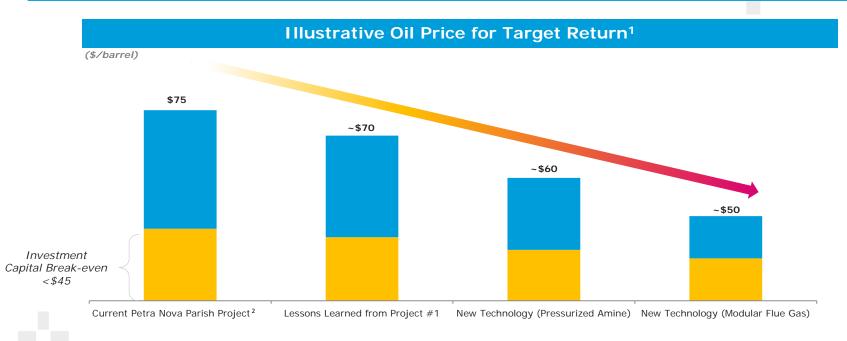
<sup>1</sup> Estimate at year 2020 assuming project online at year-end 2016; <sup>2</sup> Quality of oil produced at West Ranch field trades at a premium to WTI; <sup>3</sup> Projects would come on at varying dates with peak production based on COD Incremental NRG capital required



#### A potential EBITDA multiplier for NRG



## **Declining Costs of Carbon Capture**



<sup>1</sup> Represents after-tax 10% unlevered return; Oil prices represent today's dollars adjusted for annual inflation

<sup>2</sup> Represents Petra Nova Parish Project with expansion fields

NRG Carbon 360 will be a first-mover in capitalizing on declining capital costs for carbon capture





## Upside Benefit in Monetizing CO<sub>2</sub>

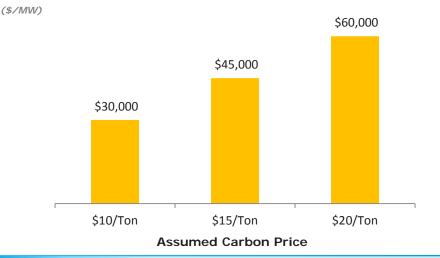
### **Core Objective:**

Recover investment through monetizing NRG equity CO<sub>2</sub>

### NRG's Carbon 360 Benefit:

Creates long-term coal plant advantage in a carbon constrained market

### Texas Power Sales Gross Margin Uplift<sup>1</sup>



ustrative Gross Margin Uplift of ERCOT Coal Fleet <sup>2</sup> (\$ millions)	~ \$65	~ \$95	~ \$125	
--	--------	--------	---------	--

<sup>1</sup> Assumes 90% CO<sub>2</sub> removal rate per MW of generation, 1 ton/MWh baseline carbon emissions, 80% capacity factor, and \$0.53/MWh uplift in power prices for every \$1/ton carbon price <sup>2</sup> Assumes 50% of NRG's Texas coal assets are captured

Potential gross margin uplift for NRG's Texas coal assets is a significant upside benefit





nro

Power to be free

## Vast Market Opportunity in Redefining CO<sub>2</sub>

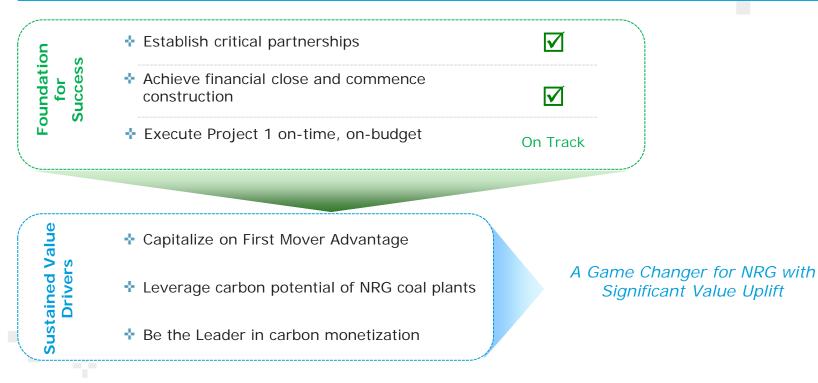


<sup>1</sup> Source: Johnson Matthey; Annually; <sup>2</sup> Source: U.S. DOE Basin Oriented Strategies for CO<sub>2</sub> Enhanced Oil Recovery. Assumes \$25/bbl net operating margin. <sup>3</sup> Source: Freedonia Group

Monetization opportunities NOT limited to enhanced oil recovery



## NRG Carbon 360 Major Milestones





NRG Carbon 360: Major Driver of Value Medium to Long Term