



Infratil Investor Day

March 29, 2017

Topics

Section 1. US Power and Renewables Markets

Section 2. Demand Drivers, Business Model, and Plan

Section 3. Progress Check-In, Opportunities, and Challenges



Longroad Energy – Business Overview



- Strategy focused on the decarbonization of the US market by participating in the development and services segments of the US utility scale wind and solar markets
- Rationale
 - >100 GW market opportunity
 - Long-term development cycle
 - Growing presence of institutional investors
- Established in 2016 by the former First Wind management team
 - Track record: 38 utility scale projects, ~4 GW, > \$10 B total capital raised
 - Principals together for nearly 10 years; nearly entire staff from First Wind
 - The company is being re-established, with offices in Boston, San Francisco, and Portland, Maine
- Longroad is jointly owned by Infratil (45%), The New Zealand Superannuation Fund (45%), and the Longroad management team (10%)
- Competitive advantages are broad and flexible mandate, track record, revolving capital, and no forced exit/sale

Key Personnel

Longroad is the core team that established and managed First Wind and sold it to SunEdison and TerraForm Power in January 2015 for an enterprise value of \$2.4 B

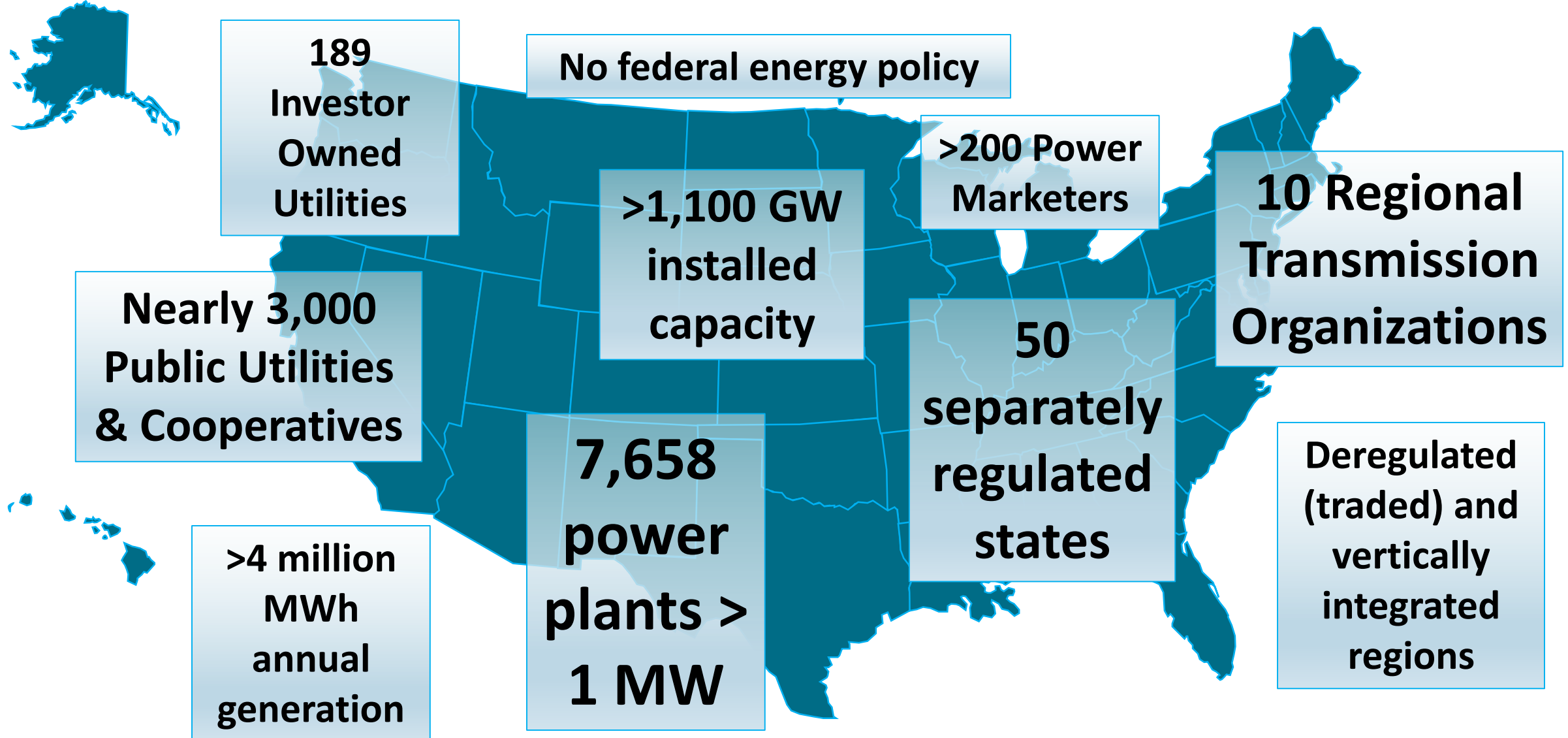
	Qualifications	Job Scope
Paul Gaynor - CEO      	SunEdison: EVP Global Utility Development First Wind: Chief Executive Officer Noble Power Assets: CFO Singapore Power: CFO PSG International: CFO GE Capital: VP Underwriting GE Power Systems: Sales Engineer	SunEdison: Delivered 2.1 GW in 2015 development deals across the globe First Wind: Co-Founder, focused on strategy, capital raising, capital allocation, development, counterparty management, board member
Michael Alvarez - COO      	SunEdison: SVP Global EPC First Wind: President, Chief Financial Officer EIX: VP Strategic Planning Nexant, Inc.: COO and CFO PSG International: Project Director TransCaspian Gas Pipeline Kenetech Energy Systems: President Thelen, Marrin, Johnson & Bridges: Partner	SunEdison: Responsible for oversight of all project construction globally (NA, EMEA, China, India, LATAM) plus IT and Facilities First Wind: Managing all Construction, Operations, HR, IT, Development, and Financing for the Company
Pete Keel - CFO    	SunEdison: CFO, Global Utility Development First Wind: SVP, Treasurer and Finance GE Capital: AVP Underwriting GE Power Systems: JMO Leadership Program	SunEdison: Led global structured finance org, raised \$2.5 B in financings to support 3 GW plan First Wind: Led financing, accounting, planning, treasury, tax and risk functions
Charles Spiliotis - CIO    	SunEdison: VP, Strategy and M&A First Wind: VP, Corporate Development and Project Finance State Street Corp: Associate, Institutional Asset Management and Services	SunEdison: Led M&A effort for high-growth global development platform, including acquisition of more than 2 GW of operating and development assets First Wind: Led corporate development and strategic planning, executed more than \$7 B in structured financing transactions across the capital structure

A photograph of a track and field running track at night. The track is illuminated by a bright light source, creating a strong reflection on the wet surface. The lanes are marked with white lines. The background is dark, suggesting a night setting.

Section 1

US Power and Renewables Markets

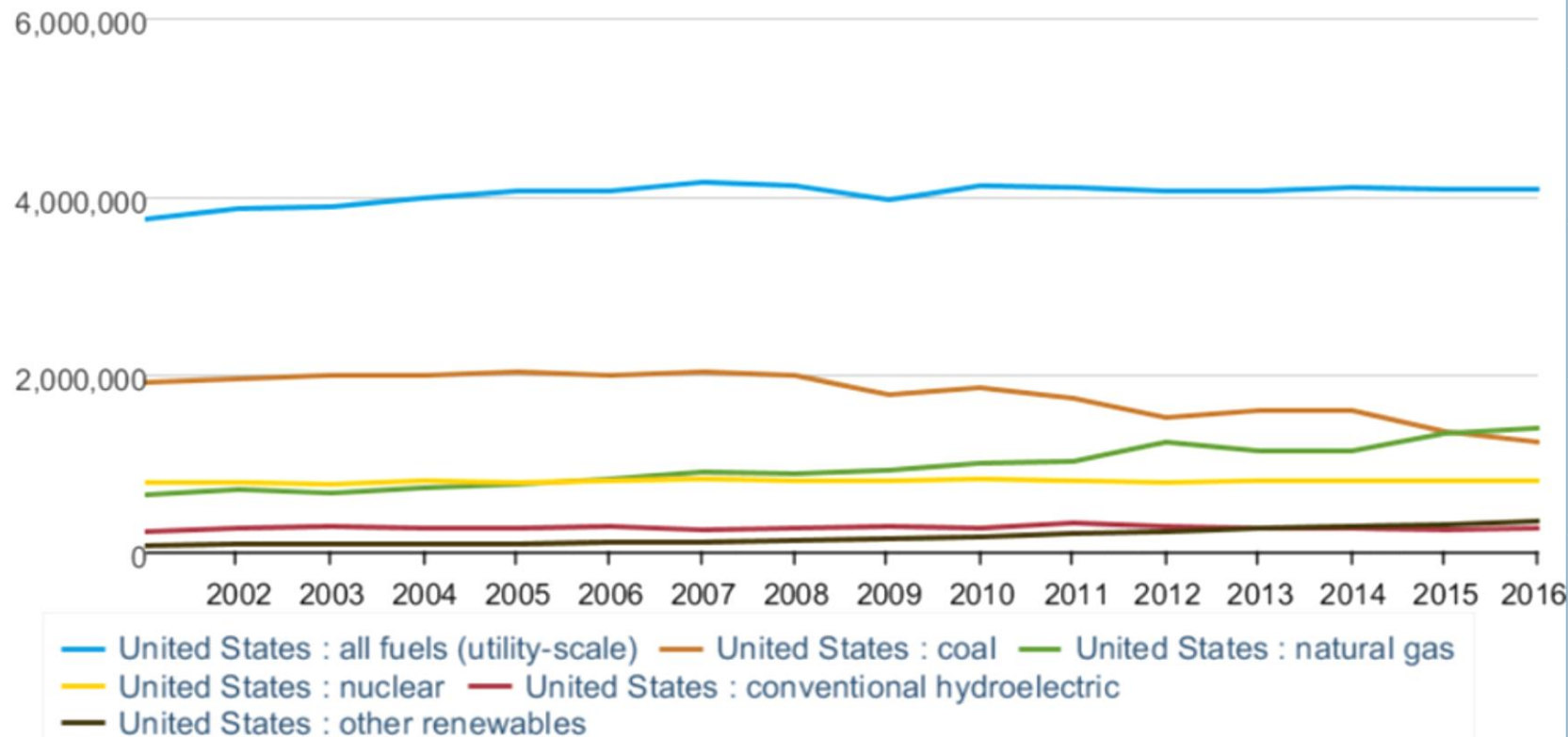
US Power Market Primer



US Power Generation

Net generation for all sectors, annual

thousand megawatthours



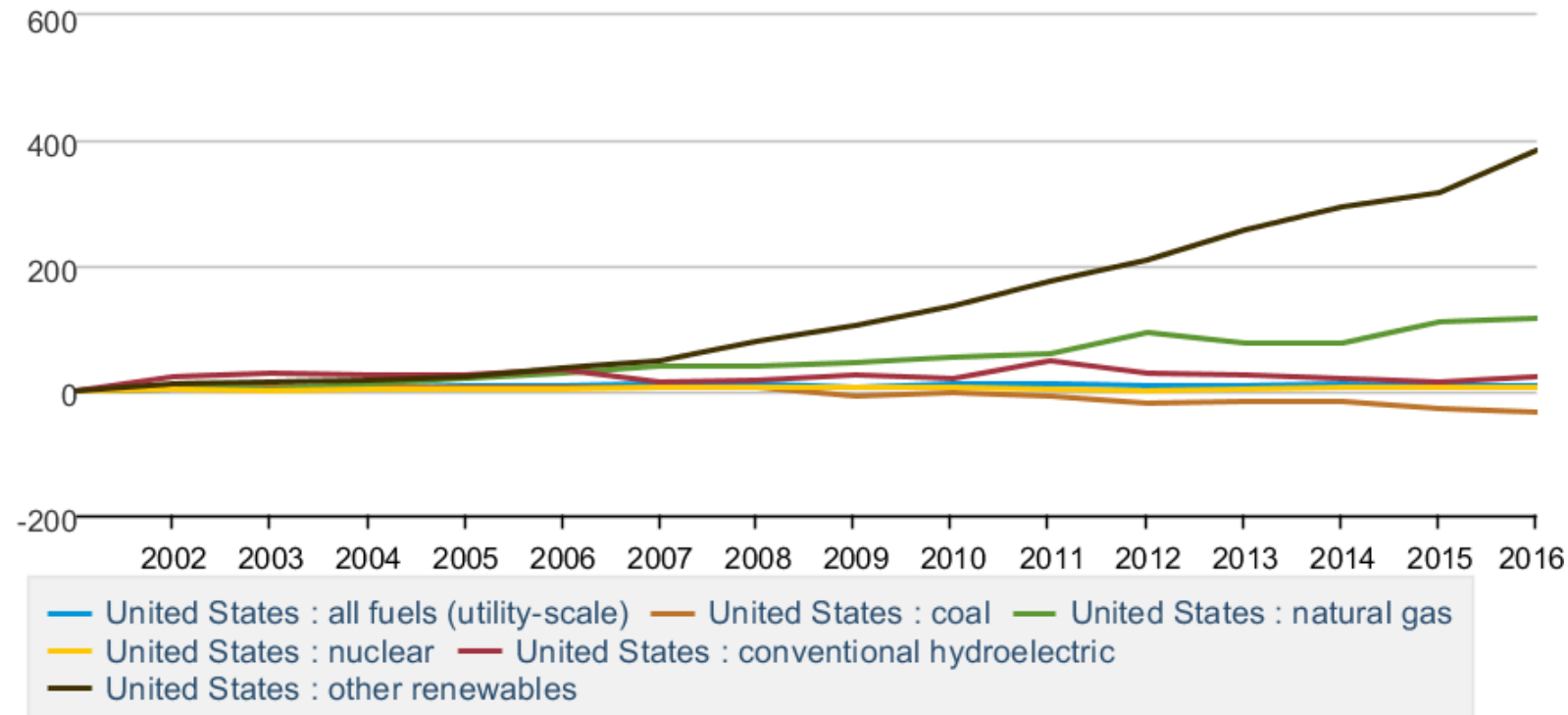
Data source: U.S. Energy Information Administration

US Power Generation: Winners and Losers

Net generation for all sectors, annual

Indexed to 2001 as percent

Percent



Renewables

+385%

Natural Gas

+116%

-35%

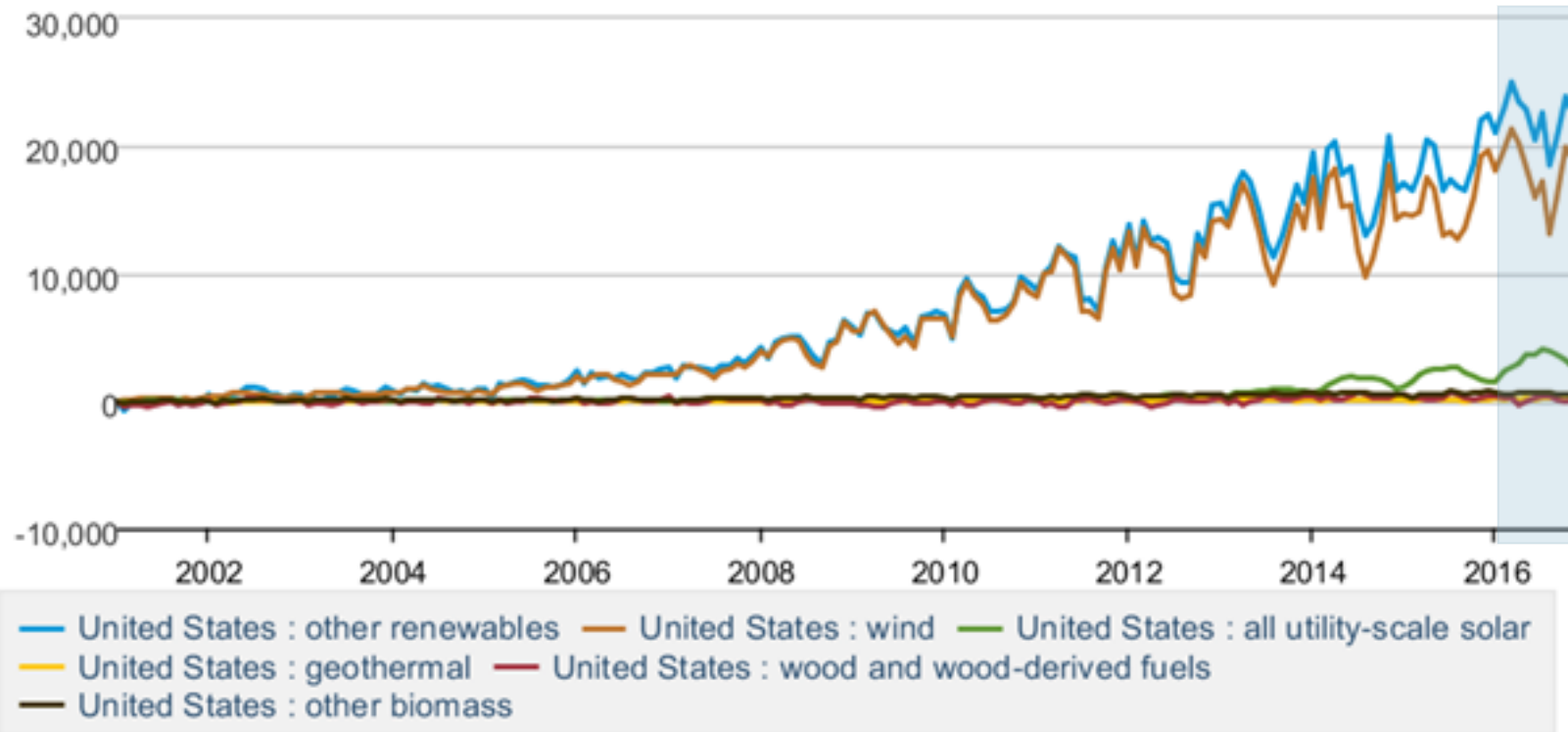
Coal

Data source: U.S. Energy Information Administration

US Renewables Generation

Net generation for all sectors, monthly

Indexed to Jan 2001 as value
thousand megawatthours



Data source: U.S. Energy Information Administration

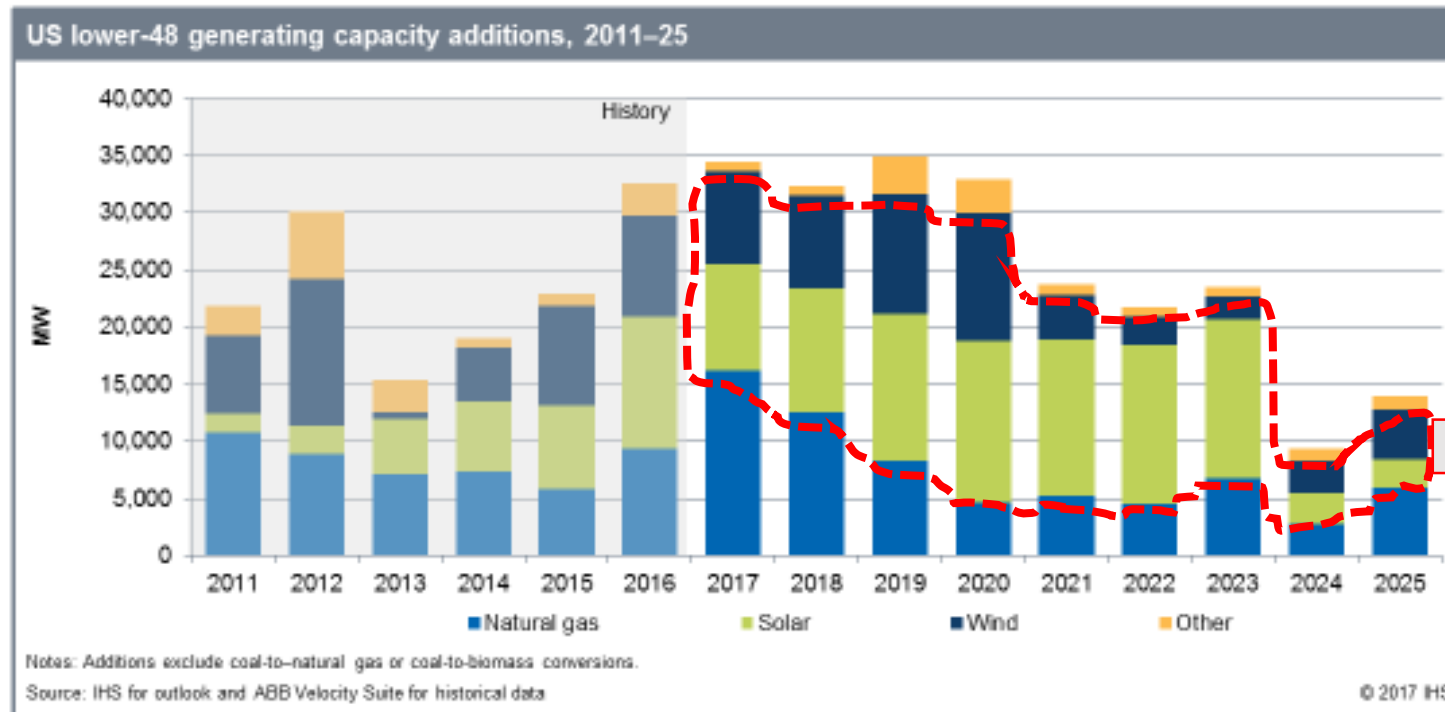
2016

- ~9% share of all generation
- ~65% of all new installed capacity

What We Are Playing For...

IHS North American Power Market Outlook | February 2017

Wind and solar dominate the outlook for capacity additions to 2025

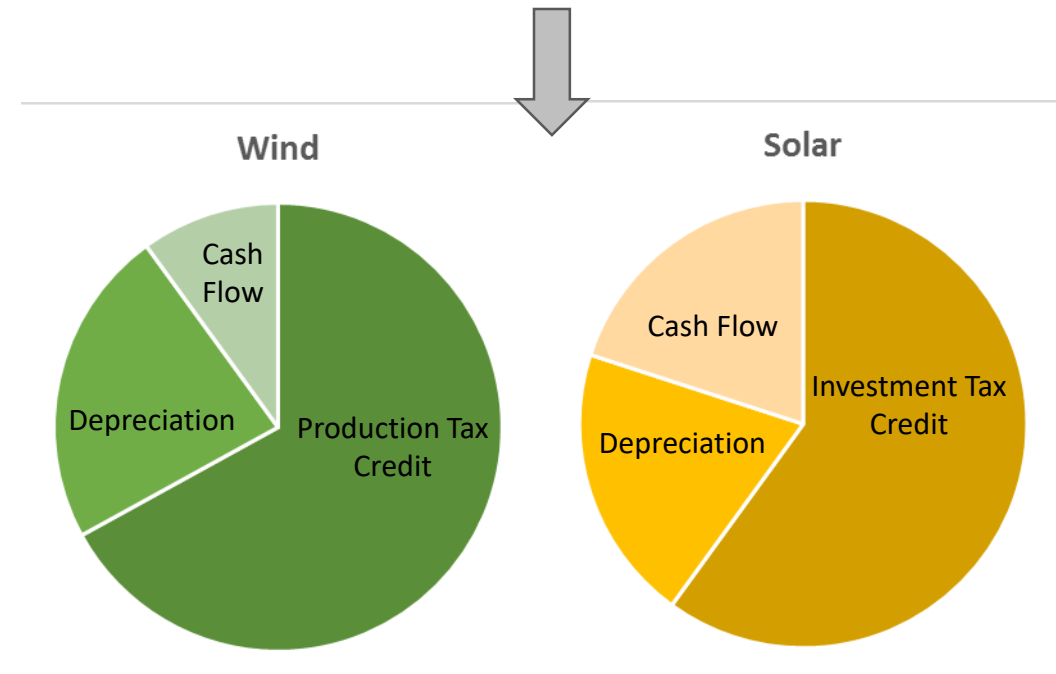
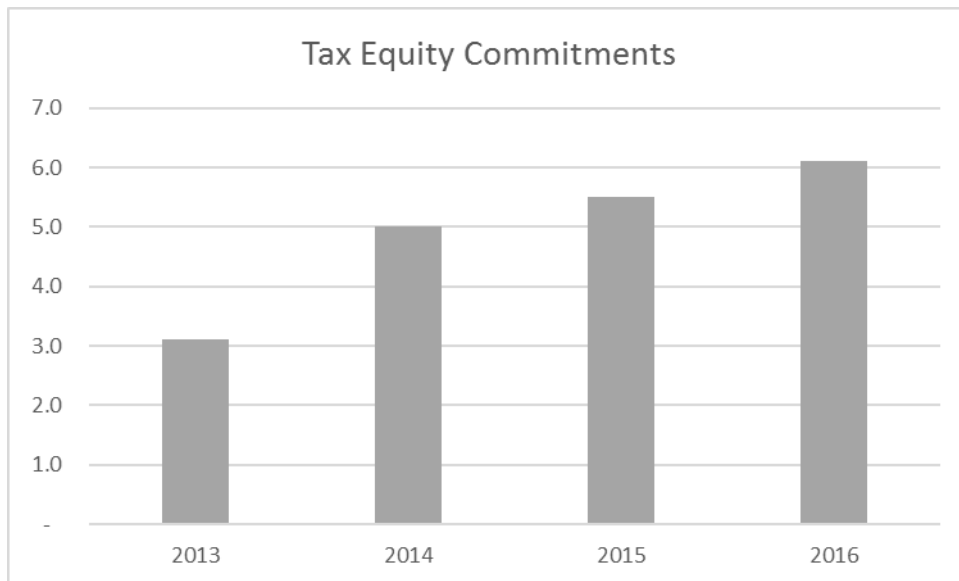


- **147 GW Wind and Solar Growth**
 - 108 GW wind and utility solar
 - 22 GW distributed solar
 - 17 GW residential solar

- In our updated planning scenario (Rivalry), wind and solar account for approximately two-thirds of the 227 GW of new supply additions during 2017–25. The historical pattern of boom-bust in wind and solar development related to tax credit expirations and extensions is assumed to continue. The dramatic decline in wind and solar additions in 2021 and 2024, respectively, relates to the schedule of tax credit expirations (see next slide).

Tax Credits - Unique Feature of US Renewables

- In place since 1986, allows non-individual taxpayers to monetize tax benefits from wind and solar projects against income tax
- Historically funded by financial institutions, corporates, and strategics with large taxable income; individual tax payers not eligible
- Benefits in the form of accelerated depreciation plus a production based credit for wind (production tax credit) and an investment based credit for solar (investment tax credit)
- Historical depth of tax equity market

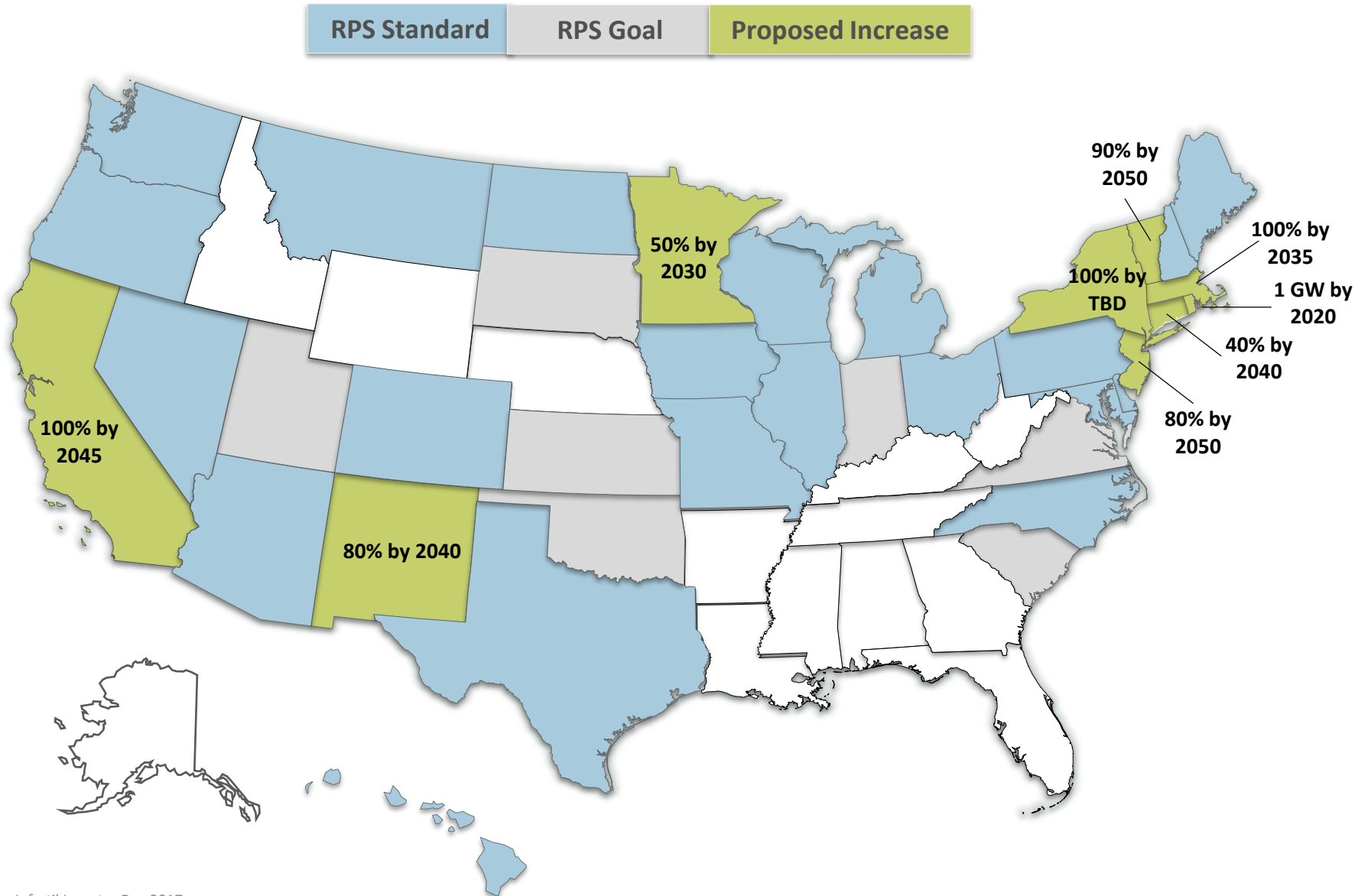


An aerial photograph of a wind farm situated in a vast, forested landscape. Several white wind turbines are visible, arranged in a line across the terrain. The trees are in various shades of green and yellow, suggesting an autumn setting. In the far distance, a range of blue mountains is visible under a clear sky. The text "Section 2" is overlaid in the center of the image.

Section 2

Demand Drivers, Business Model, and Plan

Demand Driver ① Renewable Portfolio Standards

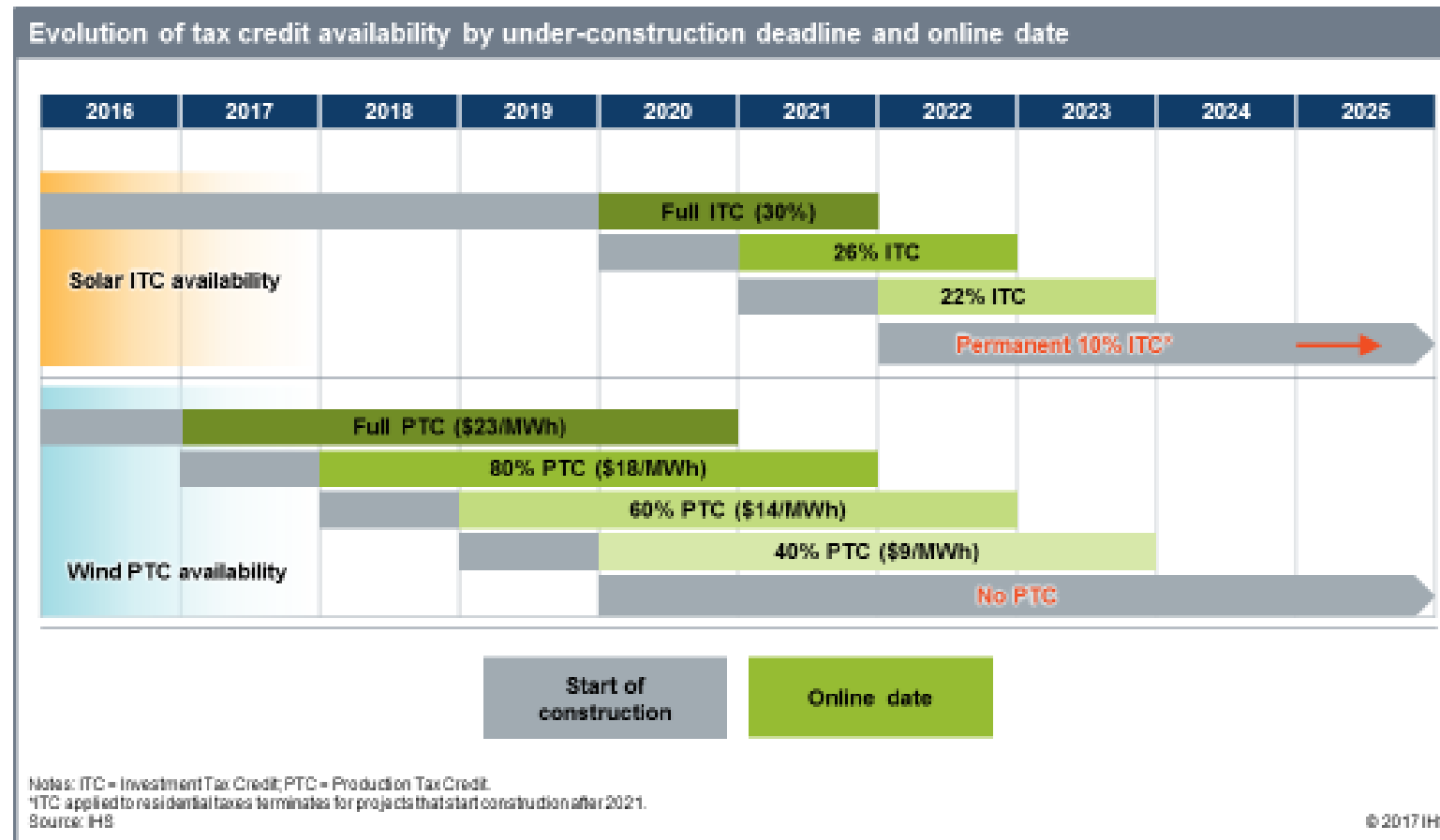


- 29 states
- Utilities' obligations to purchase defined percentage of their load from renewable resources
- State leadership holding off negative momentum emanating from DC
 - Clean Power Plan rollback
 - Potential withdrawal from Paris Climate agreement

Demand Driver ② Federal Tax Credits

IHS North American Power Market Outlook | February 2017

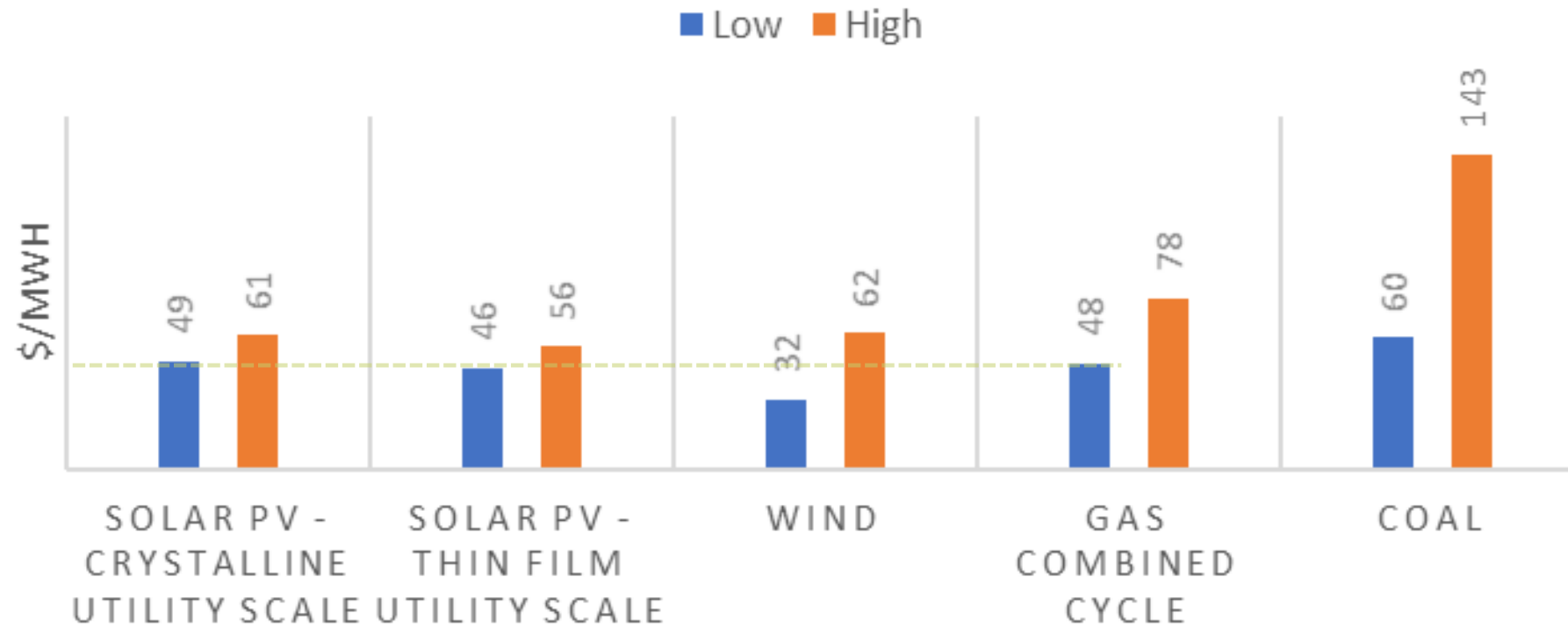
Schedule of renewable tax credits



- Expired and re-instated 8 times since inception
- Longest ever extension was put in place at end of 2015
- Phase out of both ITC and PTC
- Renewal unlikely
- Tax reform could impact deals and depth of market

Demand Driver ③ Cost

UNSUBSIDIZED LEVELIZED COST OF ENERGY



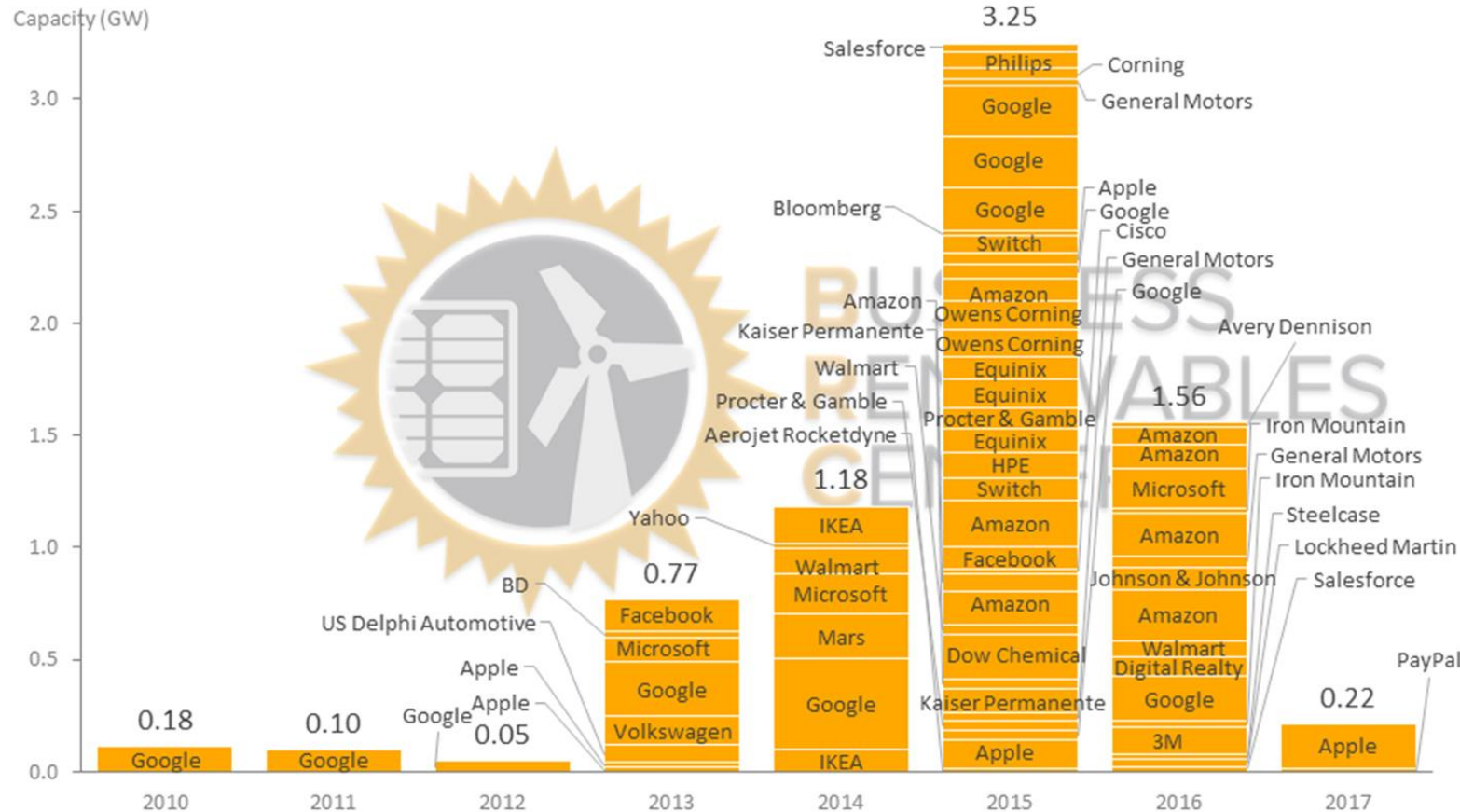
SOURCE: LAZARD'S LEVELIZED COST OF ENERGY ANALYSIS- VERSION 10.0

- Wind LCOE:
↓66% since 2009
- Solar LCOE:
↓85% since 2009

Demand Driver ④ Corporate PPAs



Corporate Renewable Deals 2010 – 2017



Publicly announced contracted capacity of corporate Power Purchase Agreements, Green Power Purchases, Green Tariffs, and Outright Project Ownership in the US and Mexico, 2012 – 2016. Excludes on-site generation (e.g., rooftop solar PV) and deals with operating plants. Last updated: March 2, 2017.

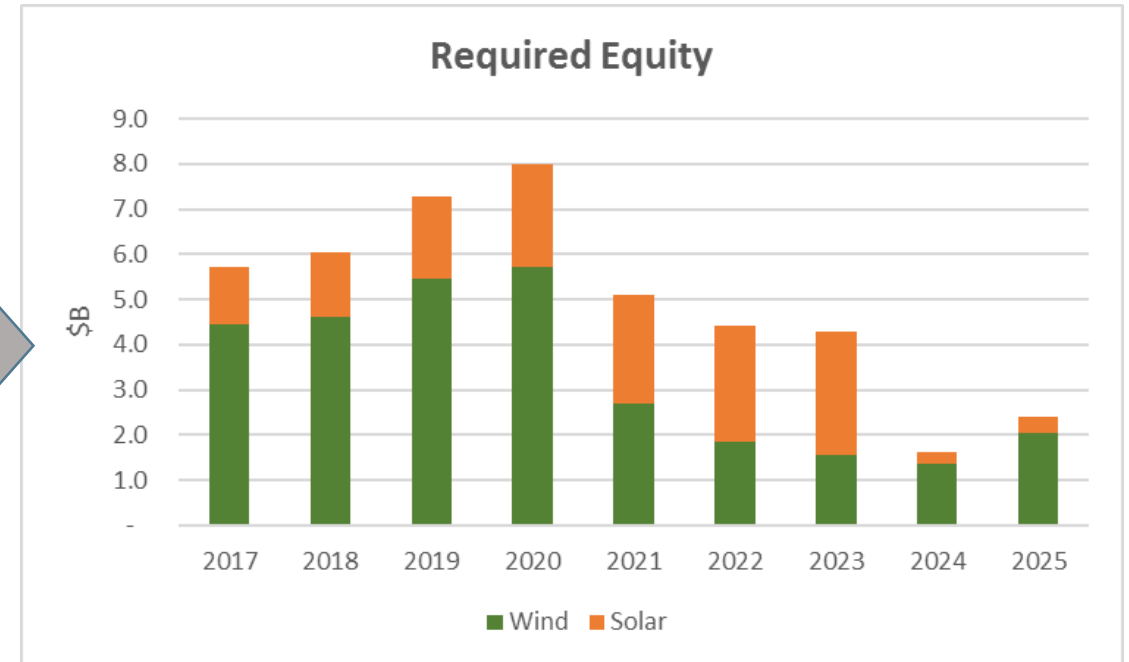
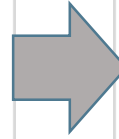
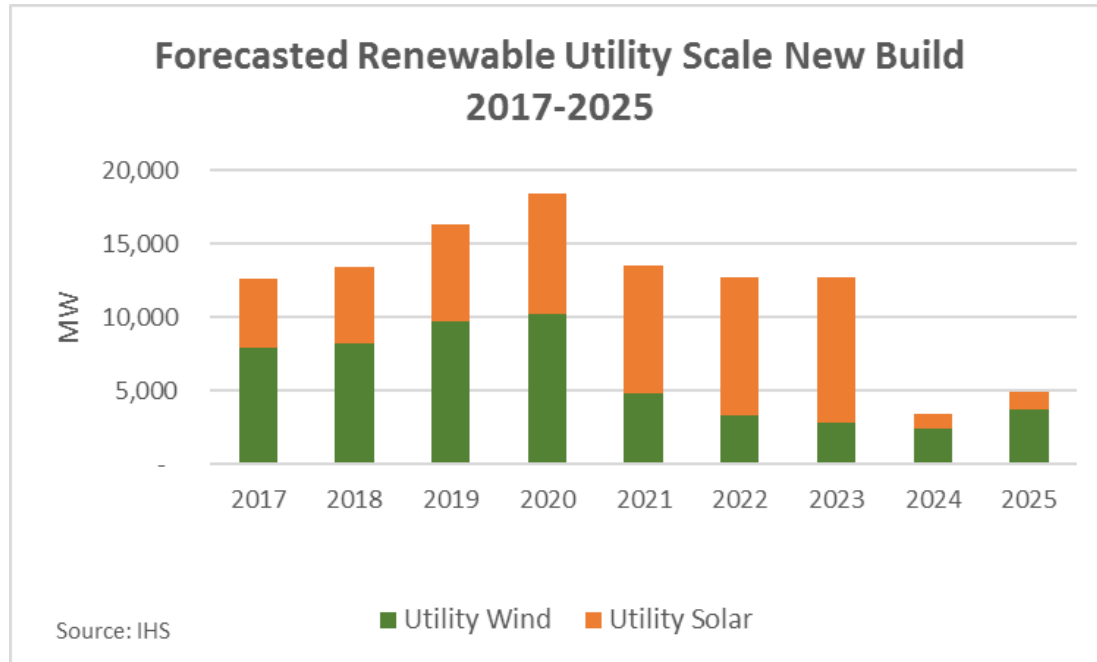
Copyright 2016 by Rocky Mountain Institute

- Corporate PPAs accounted for 50% of announced wind PPAs in 2016
- Active broker, bi-lateral, and business to business procurement activity
- Longroad staff experienced in originating corporate PPAs

Attractive Asset Class for Long-Term Owners

Investment Feature (Typical)	Wind	Solar
Asset Life (years)	30+	30-35+
Construction risk	No	No
PPA term (years)	12-25	15-25
Counterparty credit	At least investment grade	At least investment grade
Operating costs	Highly predictable with turbine vendors up to 10-15 years	20 year warranties (OEM credit questionable)
Operating and Resource risk	Yes, somewhat predictable	Yes, but highly predictable
Capital structure	35-40% equity	20-30% equity

Market Opportunity - Sizing the Business Plan



100 GW of development opportunities in attractive asset class
\$45 B investment potential for permanent equity investors

Business Model and Strategy

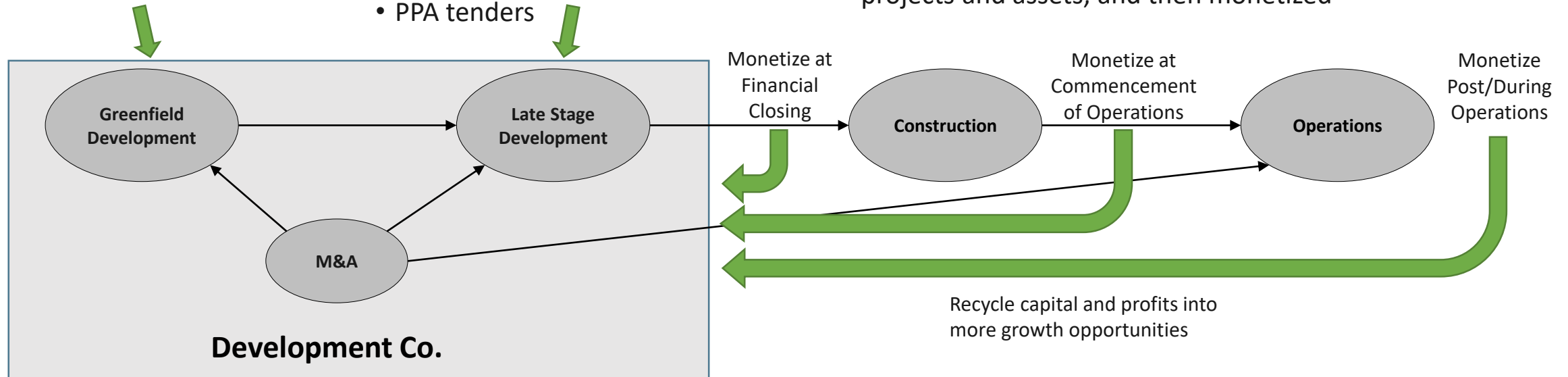
Initial Investment Capital

- Early to mid-stage development spending on organic development
- Acquisition of others' projects

Late stage capital

- Continue greenfield investment and M&A activity
- Project consolidation
- Wind turbines/panels
- PPA tenders

- Maintain flexible timing of sell downs, allowing the business model to adapt to market conditions
- Value created when risk prudently removed from projects and assets, and then monetized



Maintain flexible approach to development and M&A, thereby allowing the business model to adapt to market conditions

Operating and Asset Management Platform



End-to-end platform and internal capabilities designed to maximize long-term asset performance and value to asset owners



Section 3

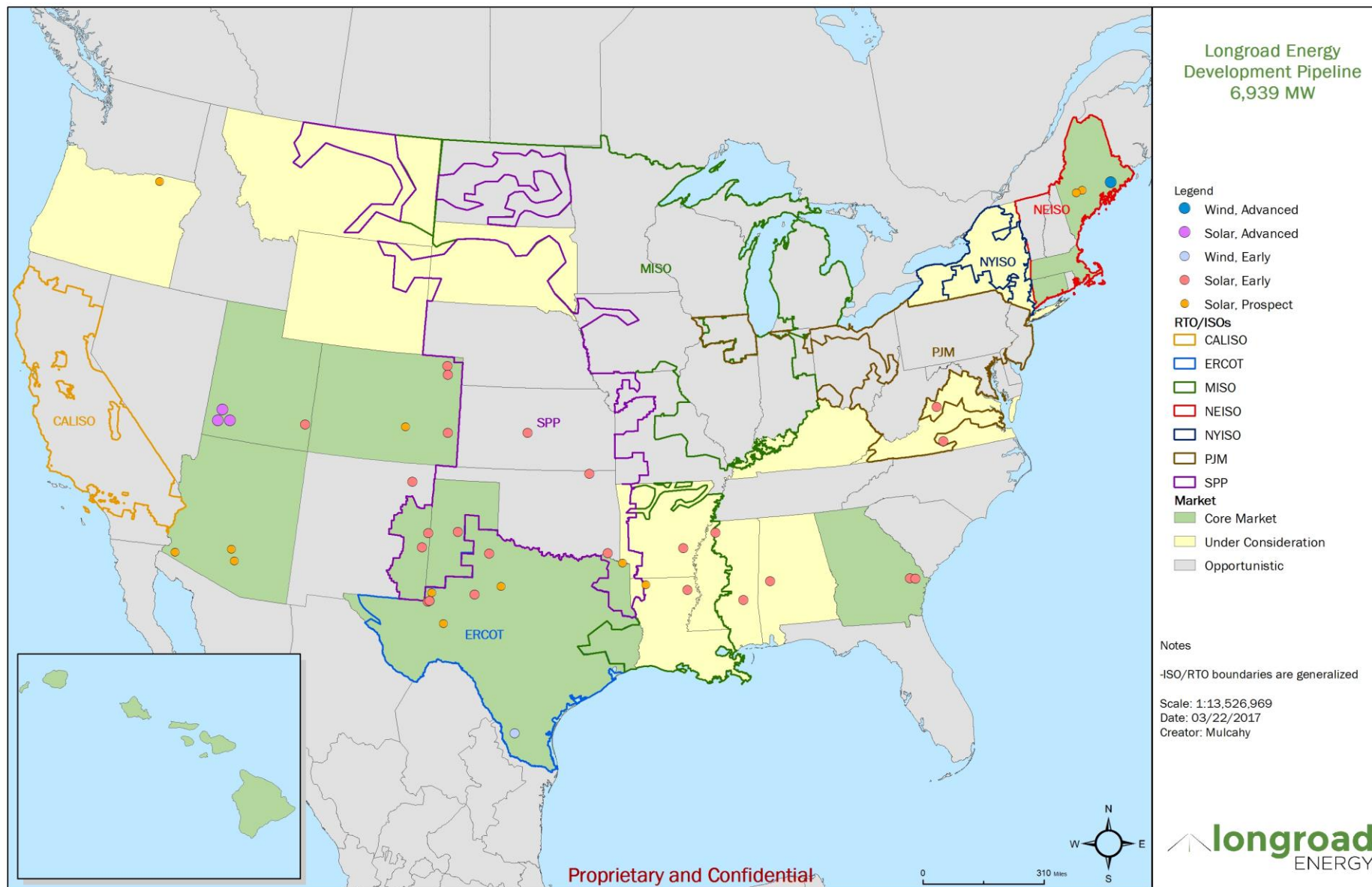
Progress Check-In, Opportunities, and Challenges

Progress Check-In



- **Team:** 23 core members in place in development, origination, transmission and interconnection, construction, permitting, solar resource, wind resource, project finance, legal, and M&A. Additional resources to be added as milestones achieved, i.e. closed projects
- **Board:** Fully in place with shareholder appointments and independent director, Ian Bowles, an energy market regulator and former Secretary of Energy and Environment for Commonwealth of Massachusetts and former Senior Director of Global Environmental Affairs at the US National Security Council
- **Solar Pipeline Acceleration:** 7X Energy acquisition - 3 GW of early to mid-stage development projects in key markets
- **PTC Component Qualification:** Purchased ~600 MW of qualifying turbine components from Vestas; allows 100% PTC value qualification so long as projects are operational by end of 2020
- **Development Pipeline:** ~7 GW in place to date, excluding M&A (see next page)

Portfolio Map (excludes M&A)



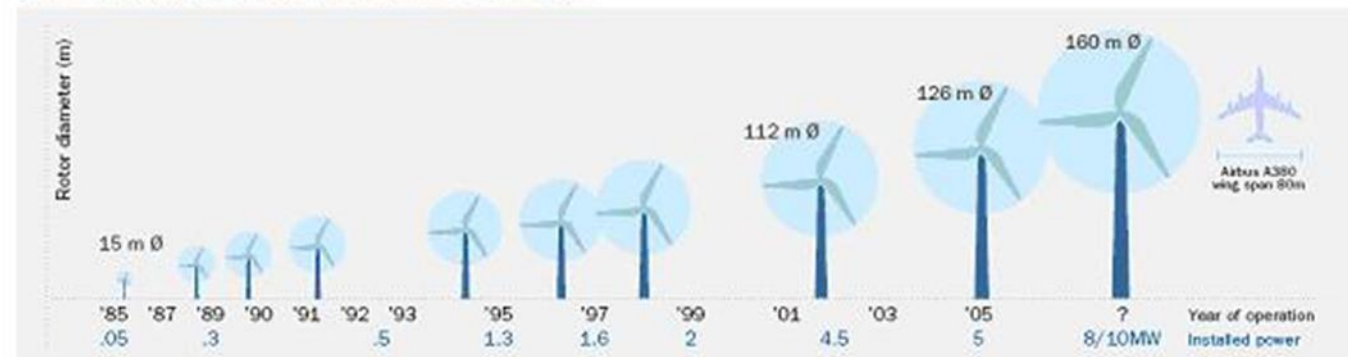
Opportunities to Leverage the Platform

- Growing and aging renewables fleet;
 - > 120 GW installed capacity at end of 2016
 - Ownership changes likely, tax investors not natural long-term owners after tax benefits expire
 - Potential to acquire, optimize operations and capital structure, then monetize
- Developer roll-up
 - Inability to access capital for projects or experience to get projects to financial closing/monetized
- Distributed solar
 - > 20 GW market until 2025
 - Returns typically higher than utility scale
 - Fragmented market; consolidation likely
- Large-scale M&A and asset sales
 - Examples: private equity backed platforms, financially strapped strategics
 - Operating assets and development portfolios in some cases

Opportunities to Leverage the Platform (cont'd)

- Storage
 - Develop in connection with solar and wind opportunities
 - Today economics and needs make Hawaii the only practical candidate
- Third party services
 - Increasing participation in asset ownership by institutional investors
 - Typically do not have dedicated asset management or operations teams
- Repowering
 - 80 GW wind farms installed before end of 2009
 - Technology has advanced significantly in last 10-20 years
 - Ability to safe harbor components to re-qualify sites for PTC

Size evolution of wind turbines over time



Challenges

- PPA market competition
 - Procurement process on nearly all PPAs, driven by corporate purchasing departments, public utility commissions, and consumer advocates
 - Sponsors aggressive on capex and opex assumptions
 - Requires discipline in developing only the best sites and limiting development spend until revenue contract in sight/in hand
- Wind site selection
 - Sophisticated wind developers have been picking through the US for over 10 years
 - Early stage development M&A very competitive
 - Mitigate risk through our own greenfield activities
- Federal tax credits revoked
 - Enacted end of 2015; reversing would be very disruptive given all the activity underway
 - Prevailing view is that administration will leave alone
 - Further mitigated by political support: significant jobs, projects, and investments in Republican Congressional districts

- Federal tax reform
 - To be undertaken immediately after health care reform
 - New administration and Republicans pushing for corporate tax reform, which would very likely include a lowering of the corporate tax rate, among other things
 - Lower corporate tax rate would have a direct impact on the structure and size of tax equity investments, requiring sponsors to invest greater percentage of equity in projects, and change the percentage of cash sharing
 - Other potential changes include changes in depreciation (100% of capex in year one), and interest deductibility (reduced to nil)
 - More investors in the market today than pre-GFC (2016: 54 active investors); potential for loss of appetite for some tax equity investors

An aerial photograph of a wind farm. In the foreground, a large white wind turbine stands on a green field. To its right, a road runs alongside a field of harvested corn. The landscape is a mix of green fields and autumn-colored forests. In the background, a valley is filled with a thick layer of white fog or low clouds. Several other wind turbines are visible on the distant hills under a clear blue sky.

Thank you !!