



An Industry in Disruption

THE FUTURE OF THE UTILITY INDUSTRY

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Outline

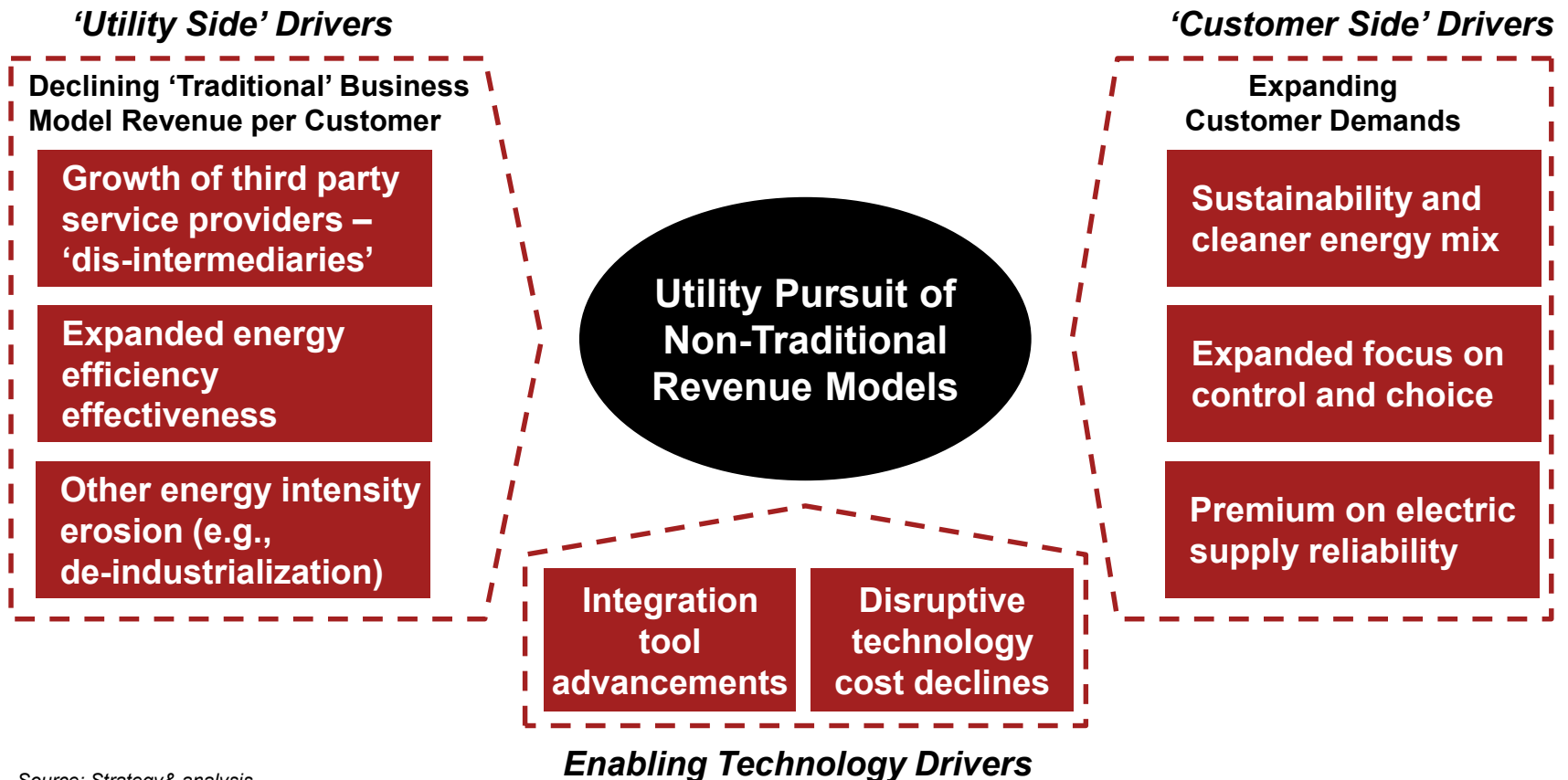
The Pace of Change

Utility Industry Highlights

Future Industry Positioning

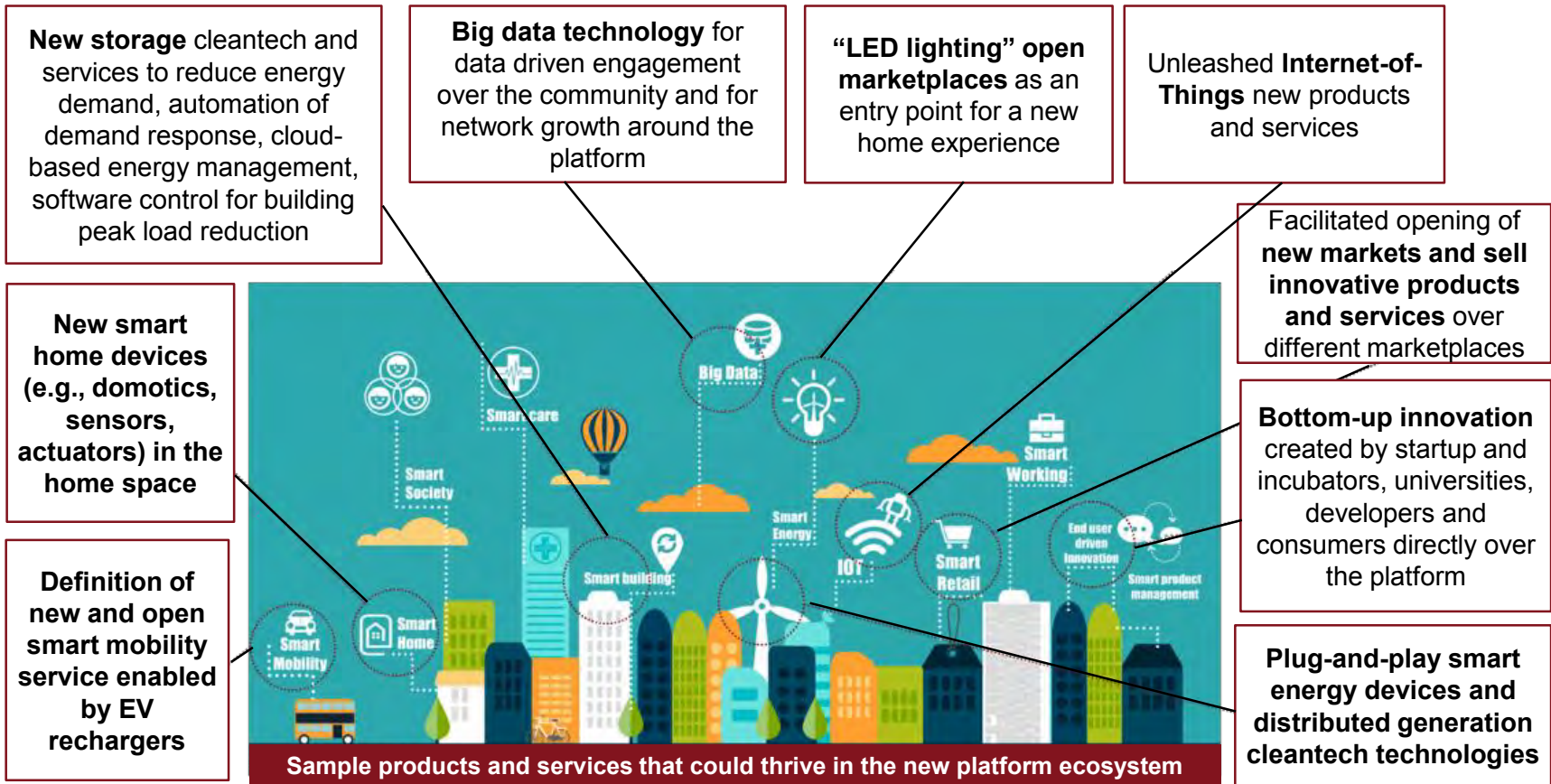
Convergence of External Drivers

Macro-Drivers of Utility Business Model Shifts

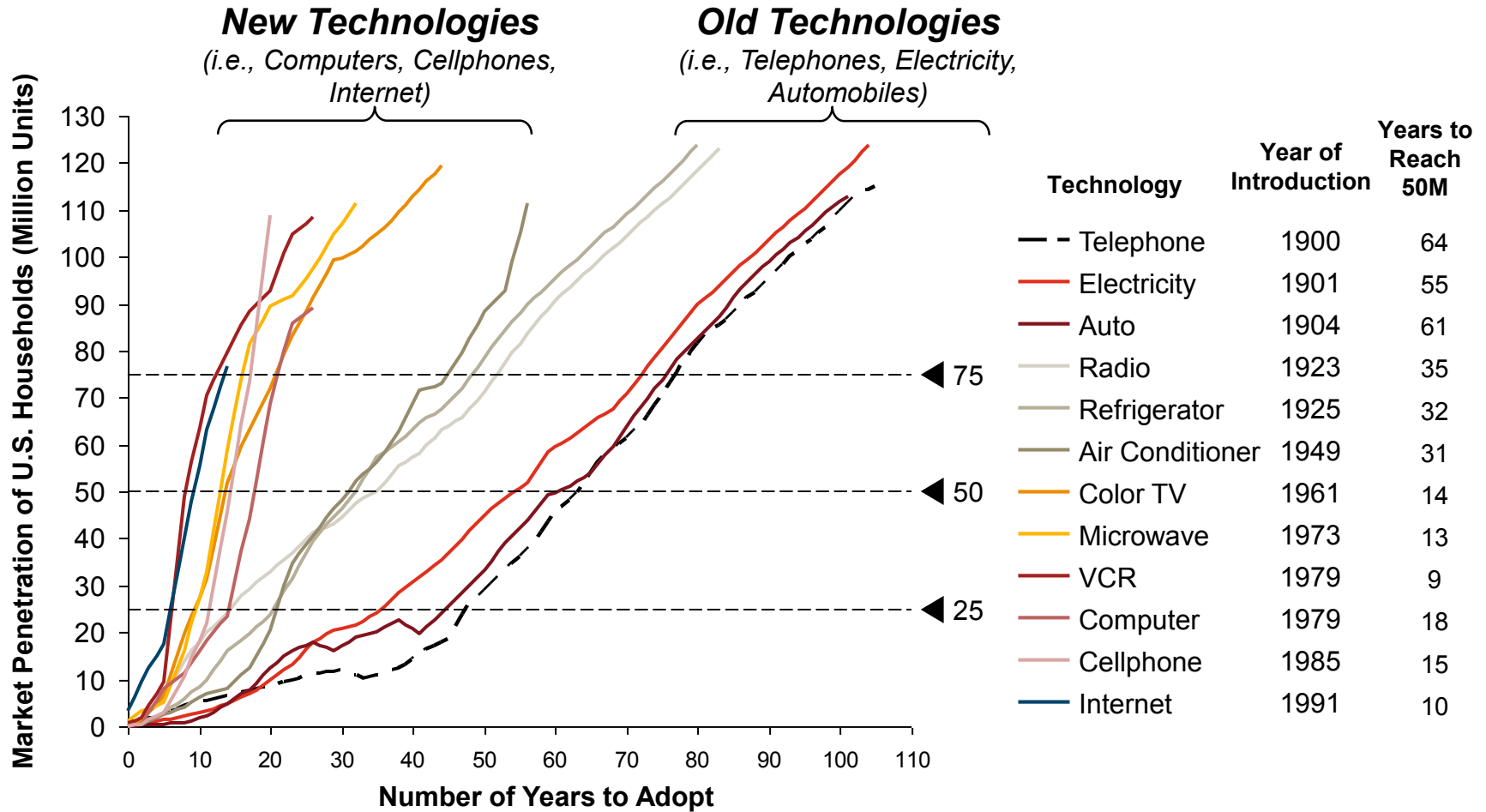


Source: Strategy& analysis

The Shape of the Future



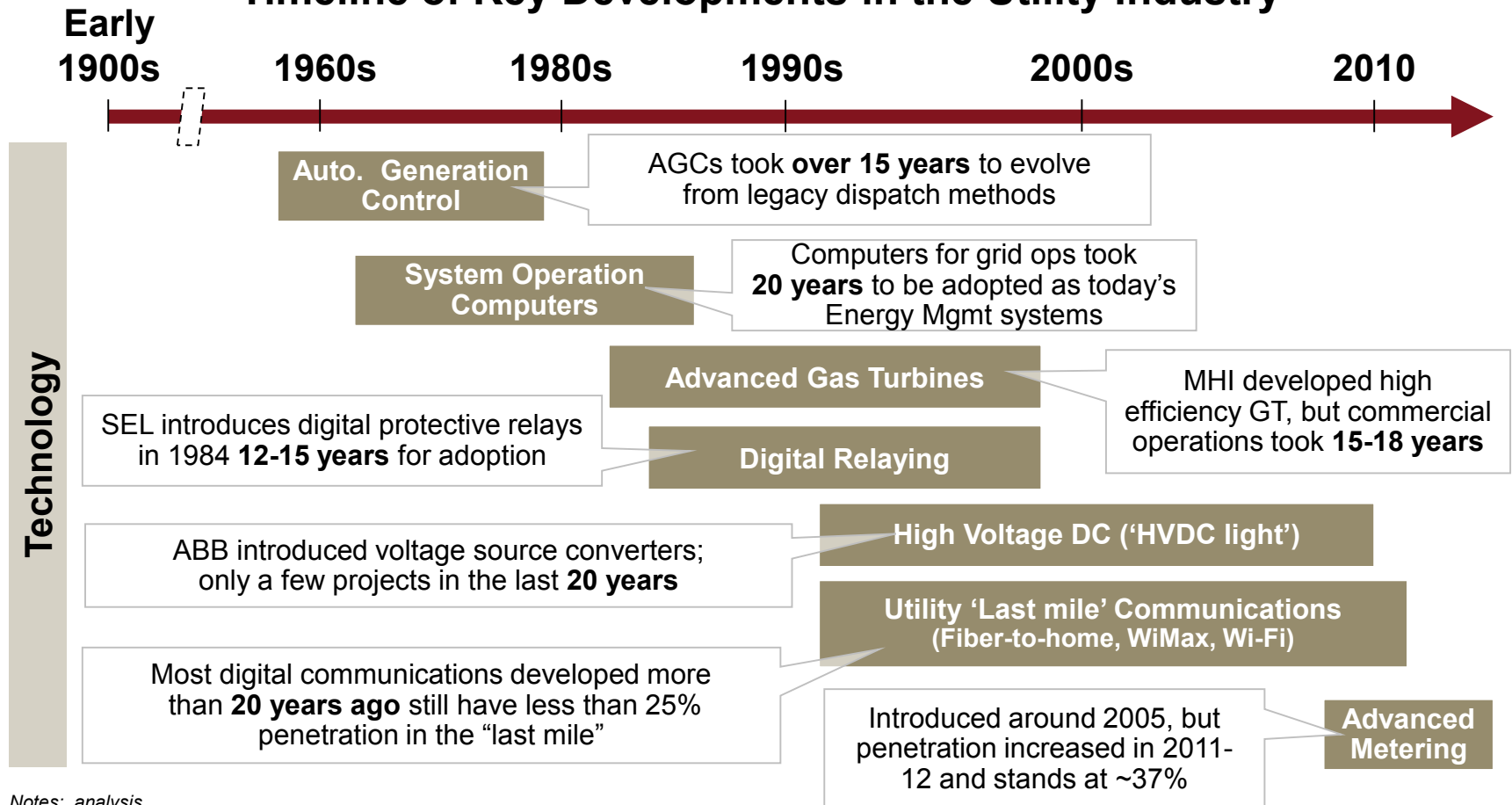
The Pace of Change



Source: Michael Felton, New York Times

An Industry Slow to Change

Timeline of Key Developments in the Utility Industry



Notes: analysis

Technology Push – Customer Pull

Technology Dimensions

New Entrants

Improved Functionality

Increasing Parity

Expanding Production

Accelerating R&D

Industry
Disruption

Customer Dimensions

Increasing Awareness

Emerging Choices

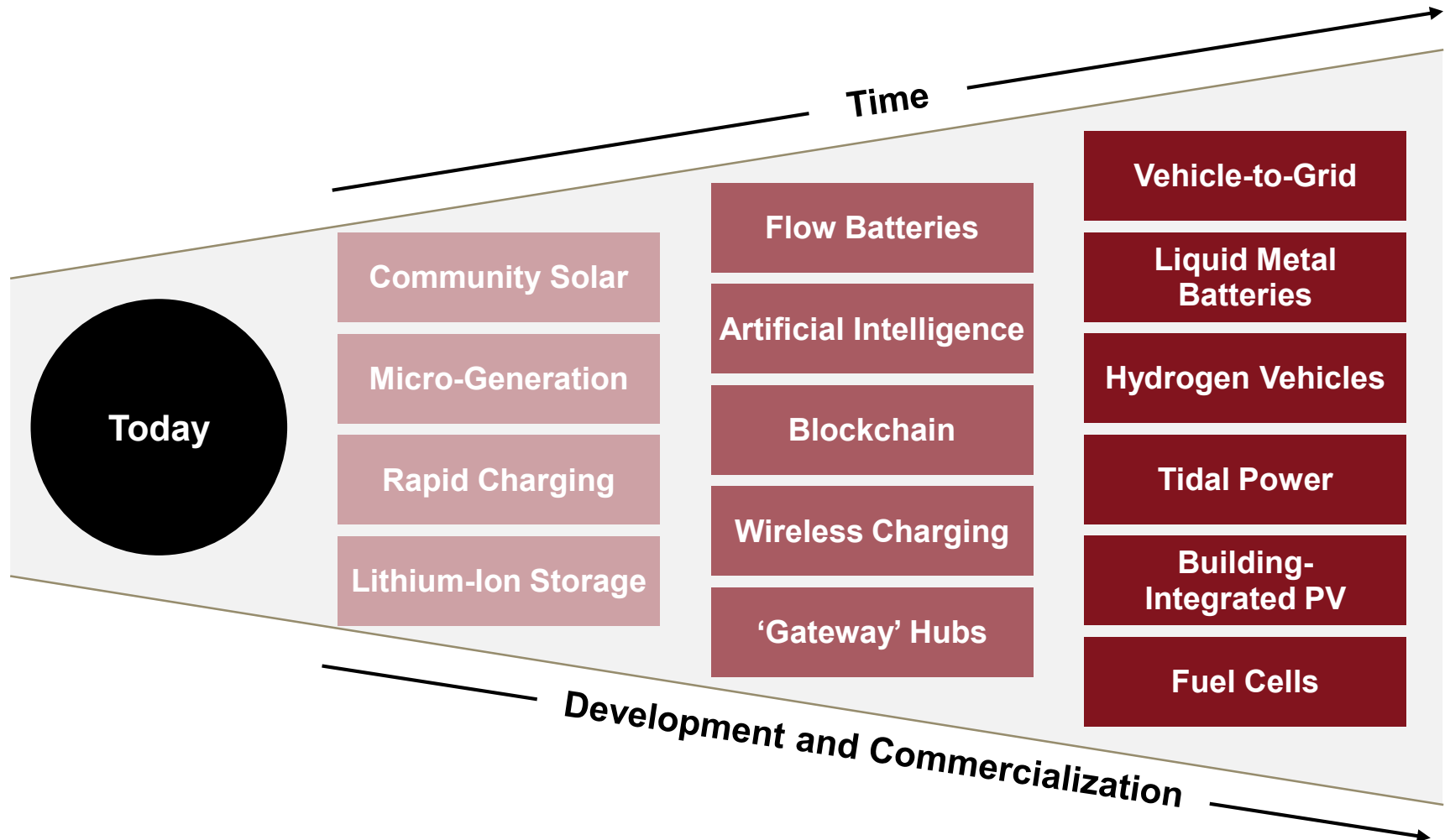
Changing Behaviors

Financing Availability

Broadening Offerings

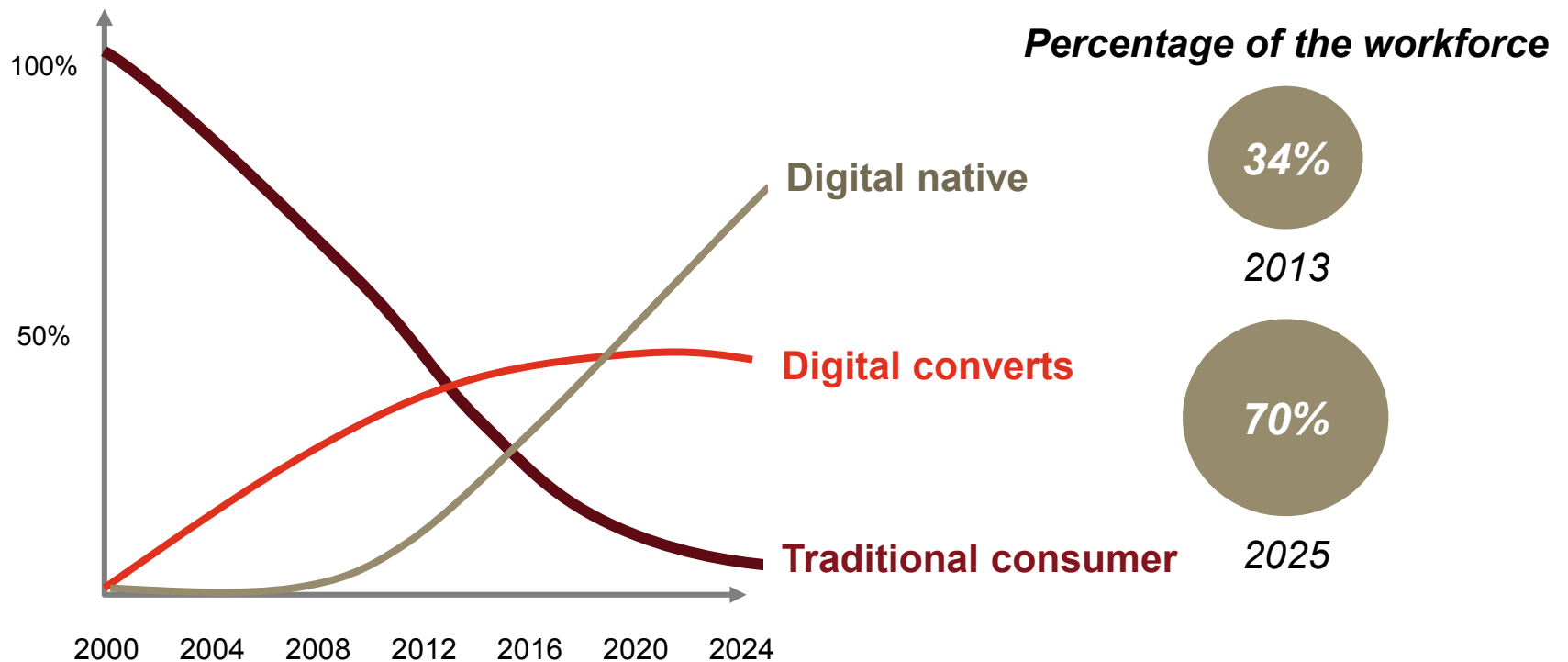
Regulatory policy – particularly in pricing and cost recovery –
lags technology introduction

Technology Evolution



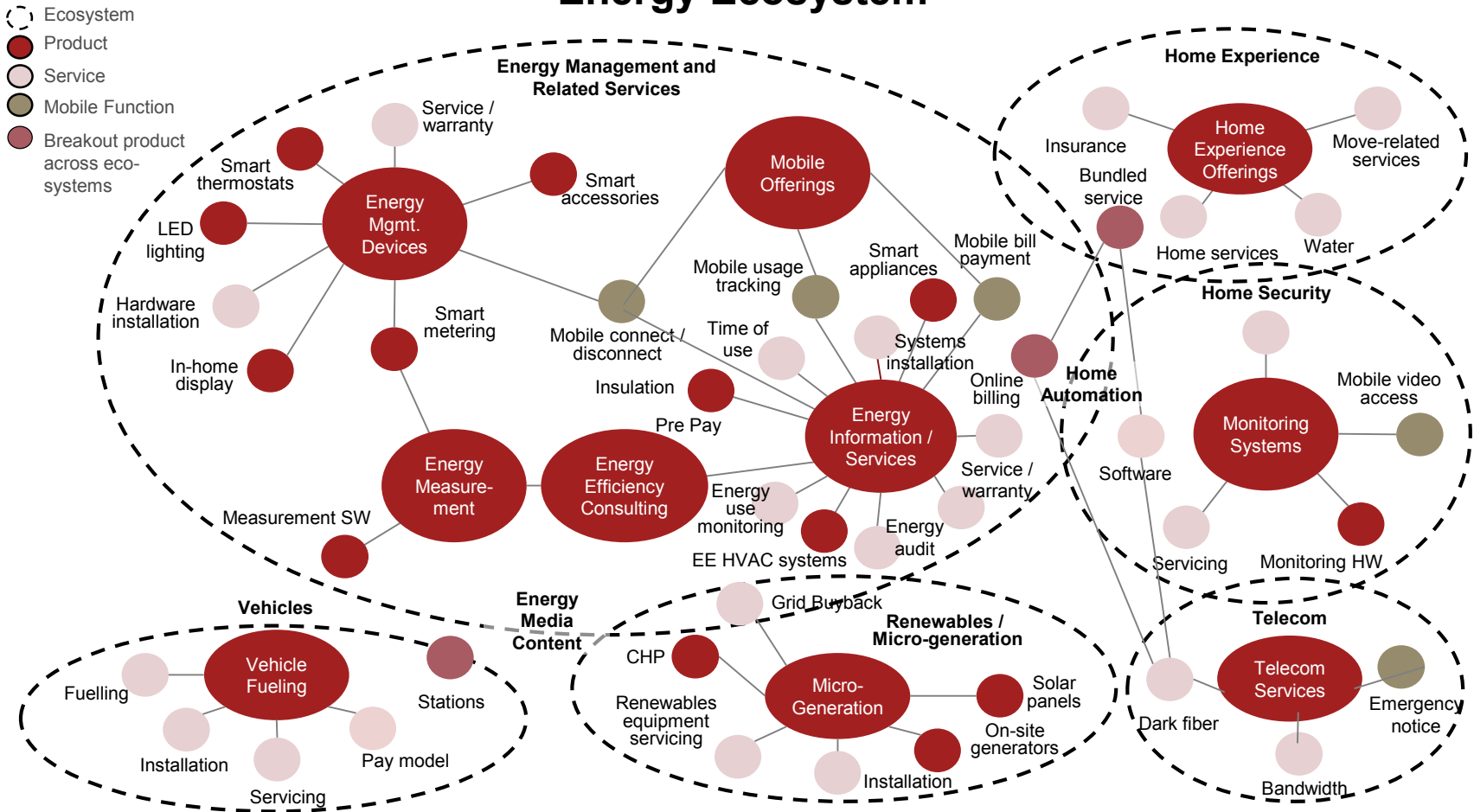
Customer Archetypes

Change in Customer Archetypes



Expanding Value Pools

Energy Ecosystem



Outline

The Pace of Change

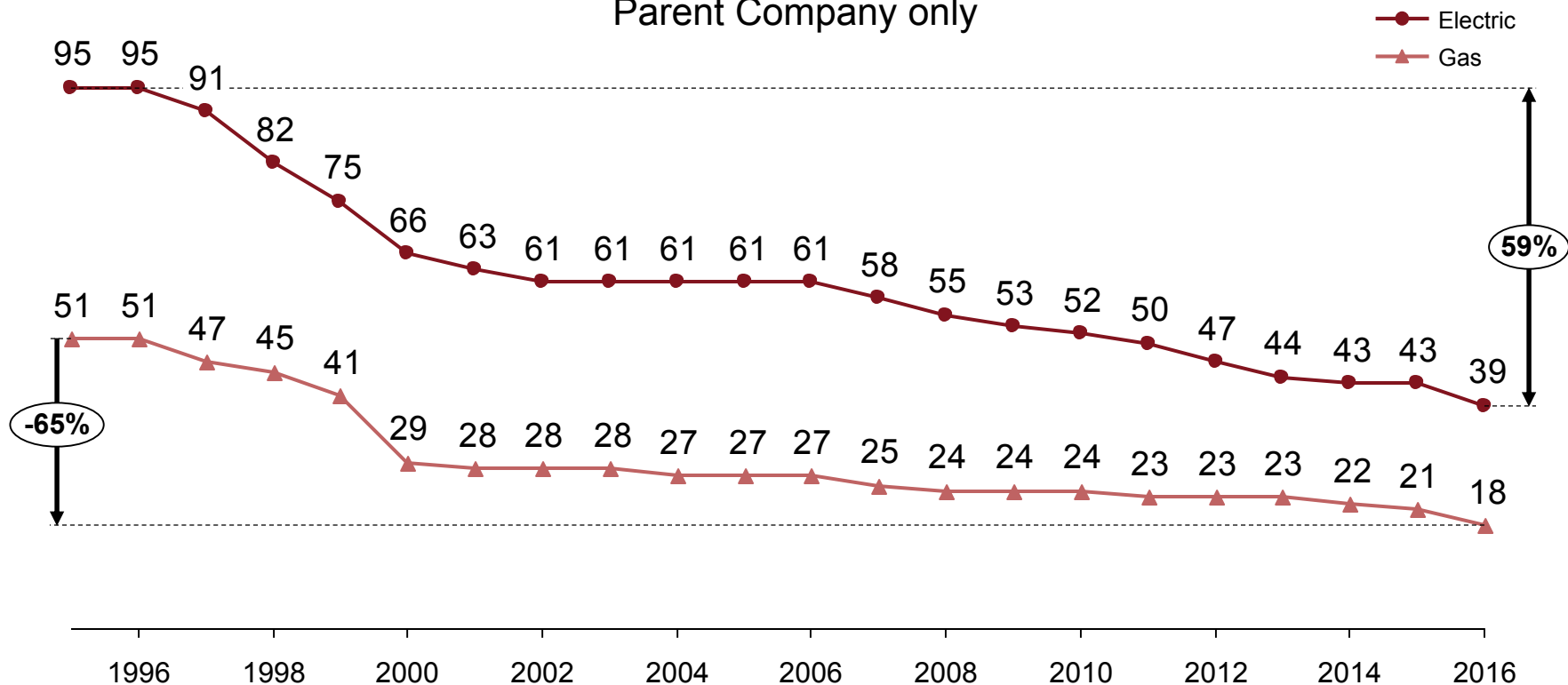
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Future Industry Positioning

A Consolidating Industry

Number of U.S. Investor-Owned Electric and Gas Utilities

Parent Company only



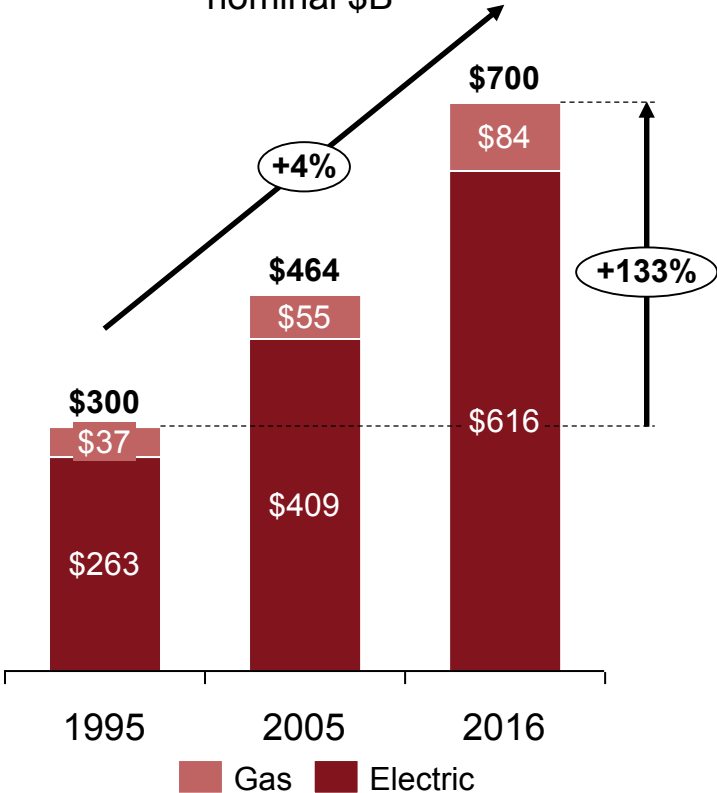
Note: Designations based on primary industry classification

Source: S&P Capital IQ, EEI, APPA, Strategy& analysis

Market Value Growth

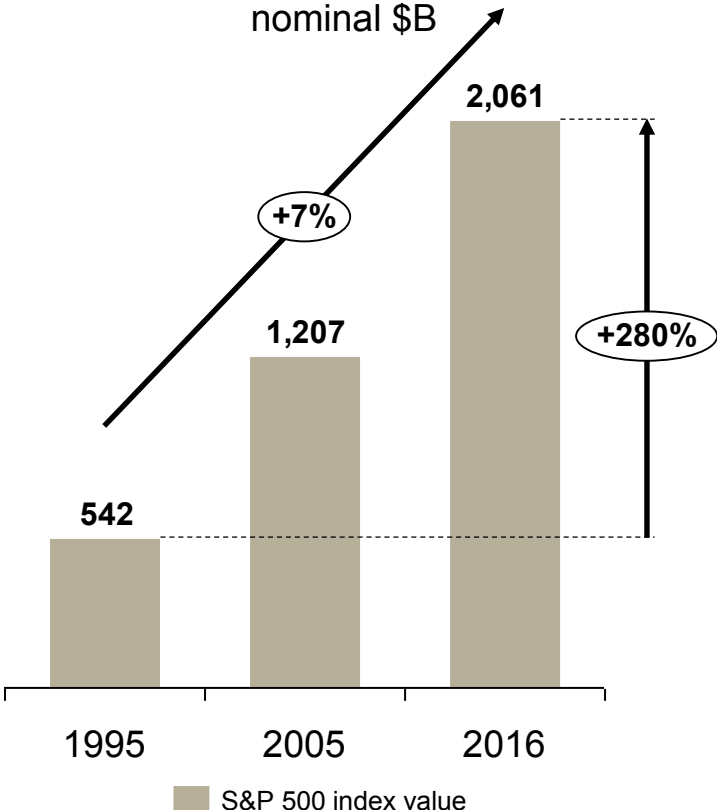
Electric and Gas Utilities

nominal \$B



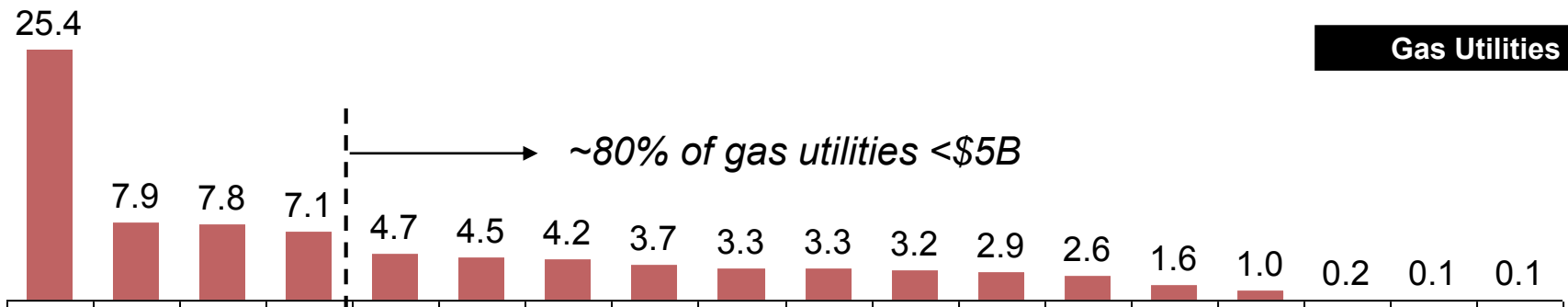
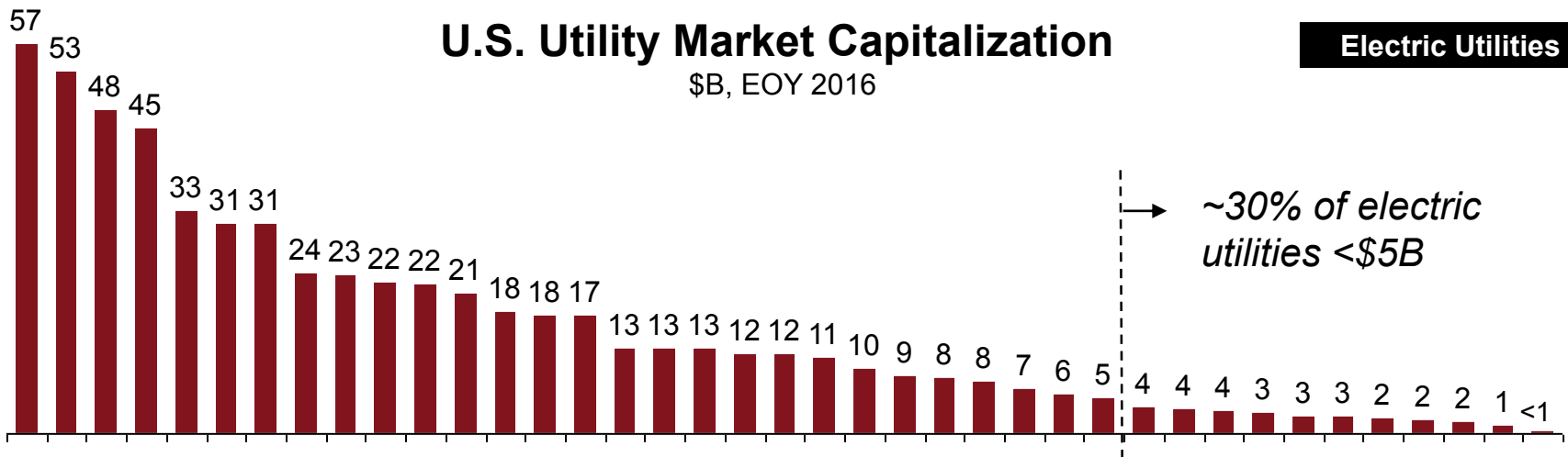
S&P 500 Index

nominal \$B



Note: Market caps as of EOY and in nominal dollars
 Source: S&P Capital IQ, EEI, APPA, Strategy& analysis

High Sector Concentration

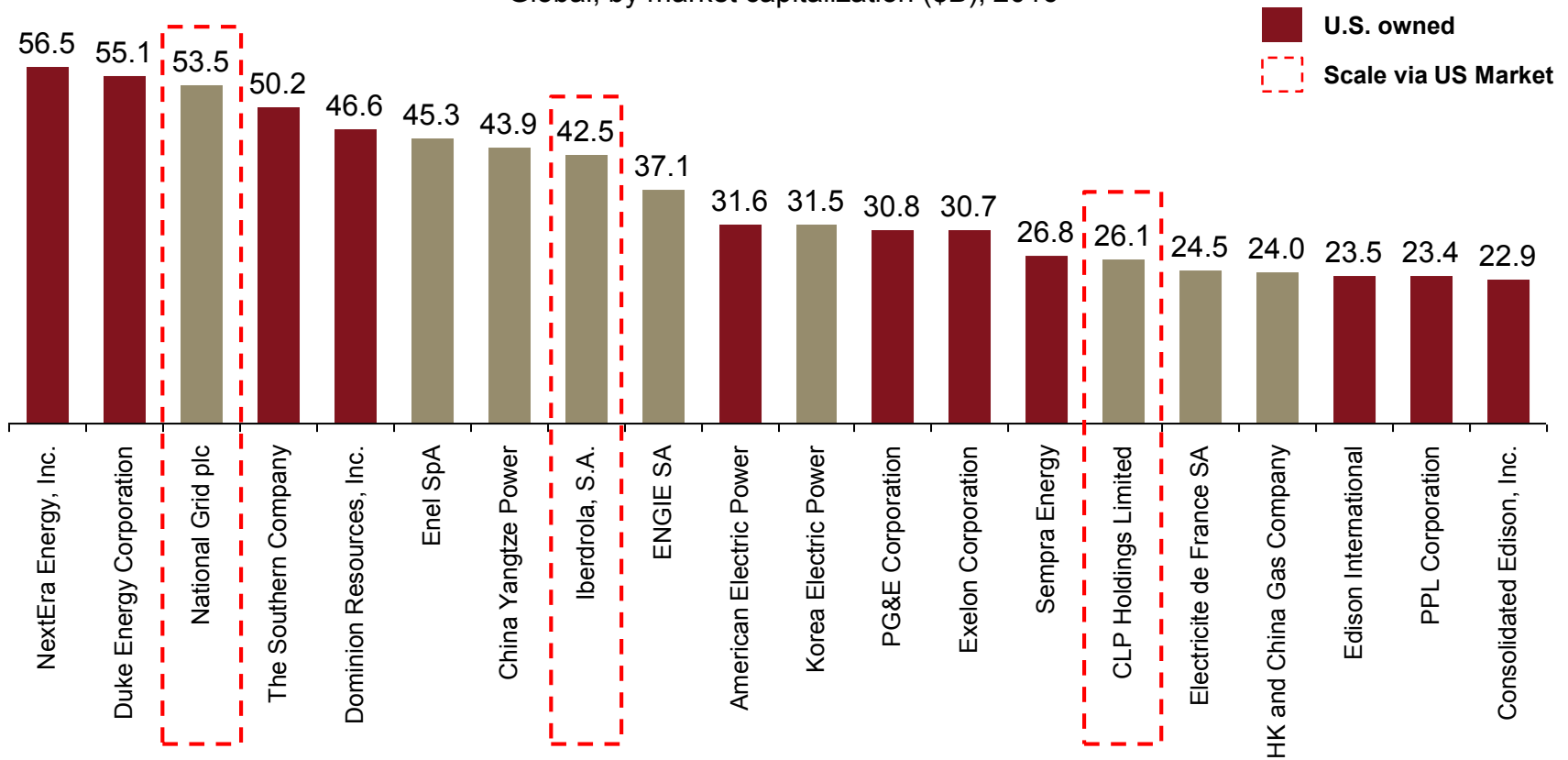


Note: Market caps as of EOY and in nominal dollars
 Source: S&P Capital IQ, EEI, APPA, Strategy& analysis

Substantial Global Presence

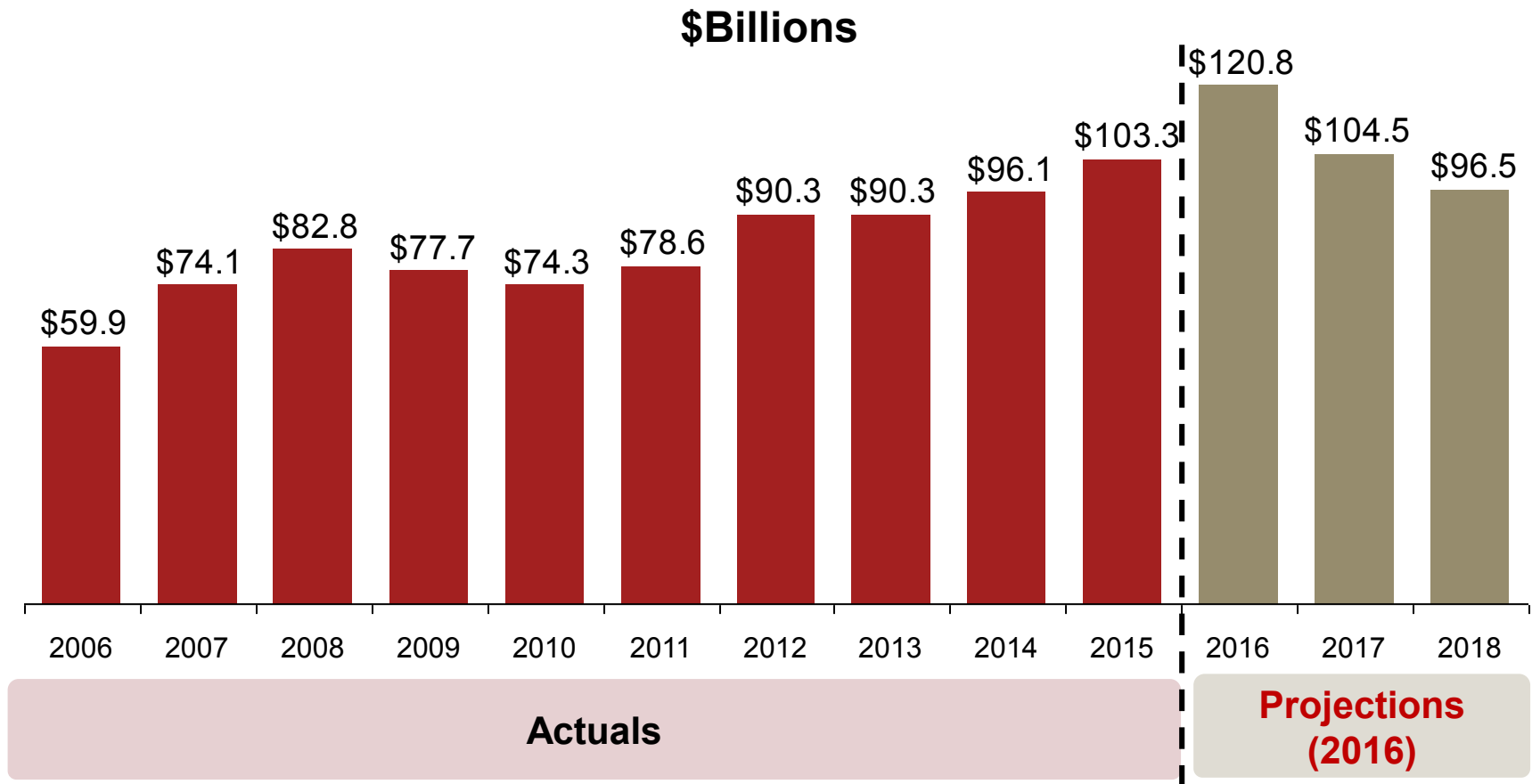
Largest Electric and Gas Utilities

Global, by market capitalization (\$B), 2016



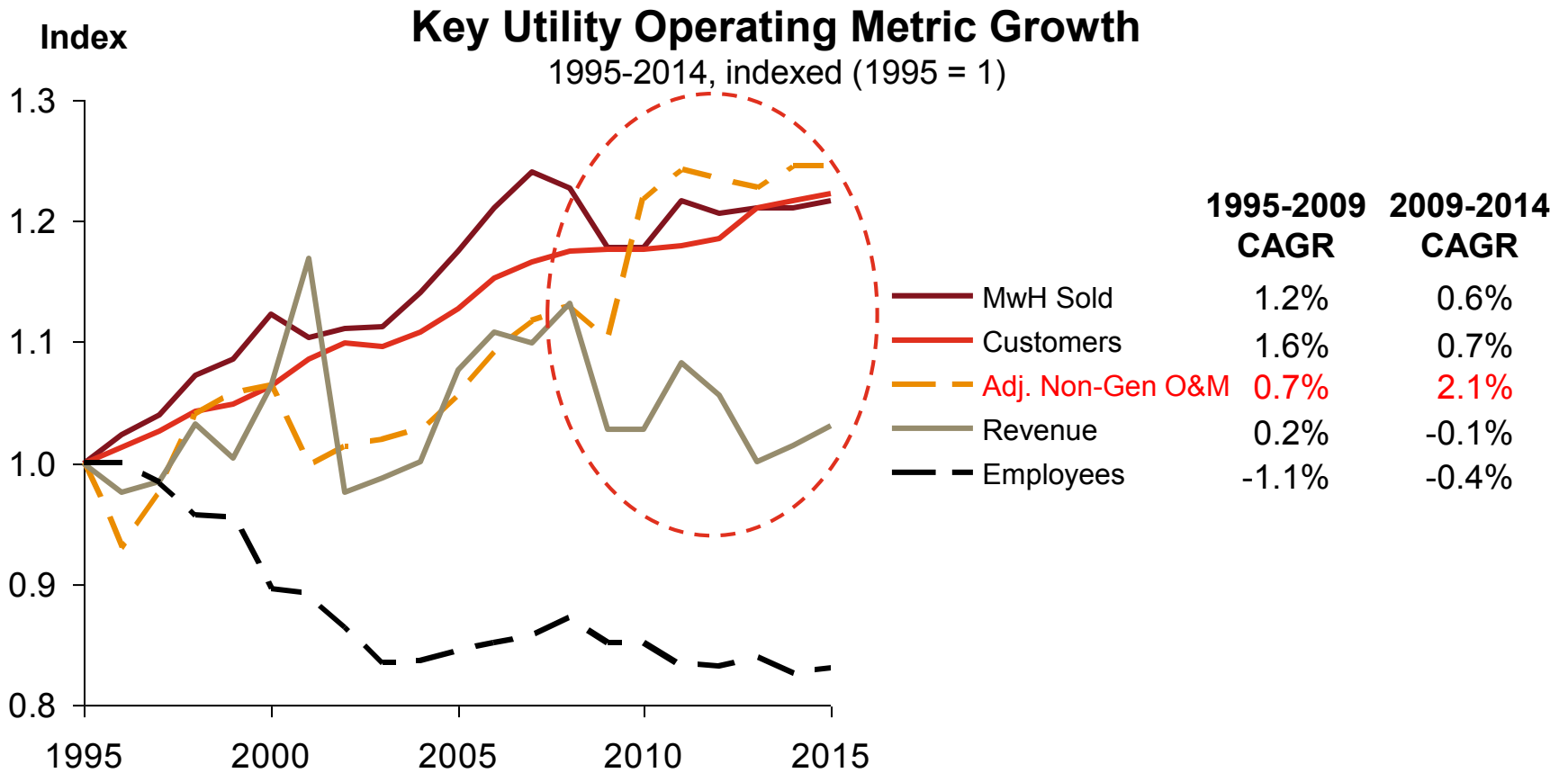
Source: S&P Capital IQ, SNL

The \$100 Billion Industry



Notes: Total company spending of U.S. Investor-Owned Electric Utilities, consolidated at the parent or appropriate holding company. Projections based on publicly available information and extrapolated for companies reporting fewer than three projected years (11% and 15% of industry for 2017 and 2018).
Source: EEI Finance Department, company reports, S&P Global Market Intelligence (August 2016).

Business v. Cost Growth

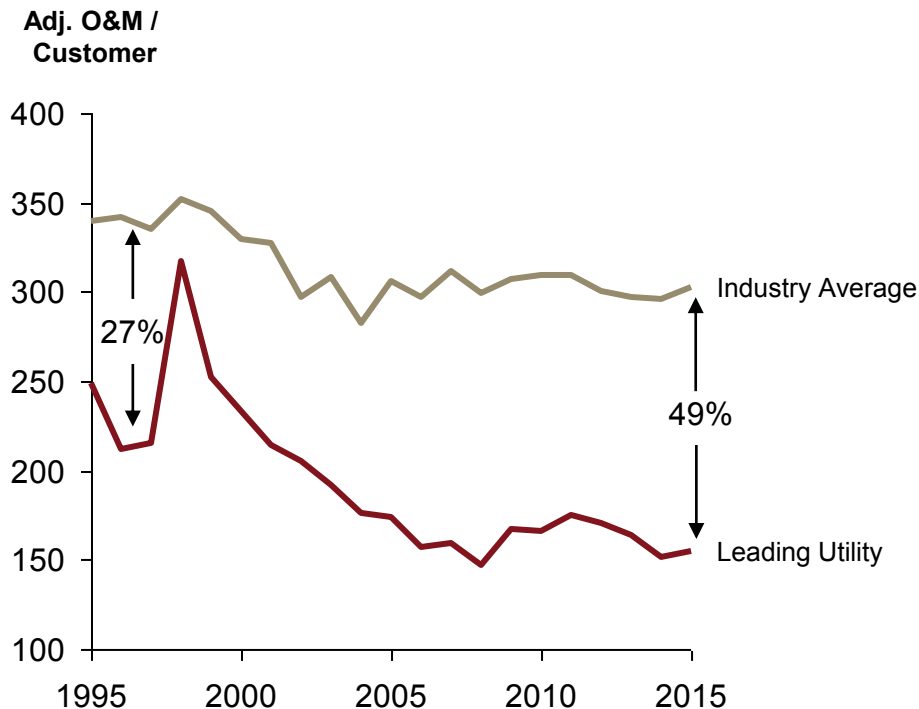


Note: O&M adjusted for inflation; company set for employment data includes only companies with data for all years
Source: SNL, Edison Electric Institute, Strategy& analysis

Dramatic Cost Differentials

Adjusted O&M / Customer

Leading Utility vs. Average, 1995-2015



Discussion

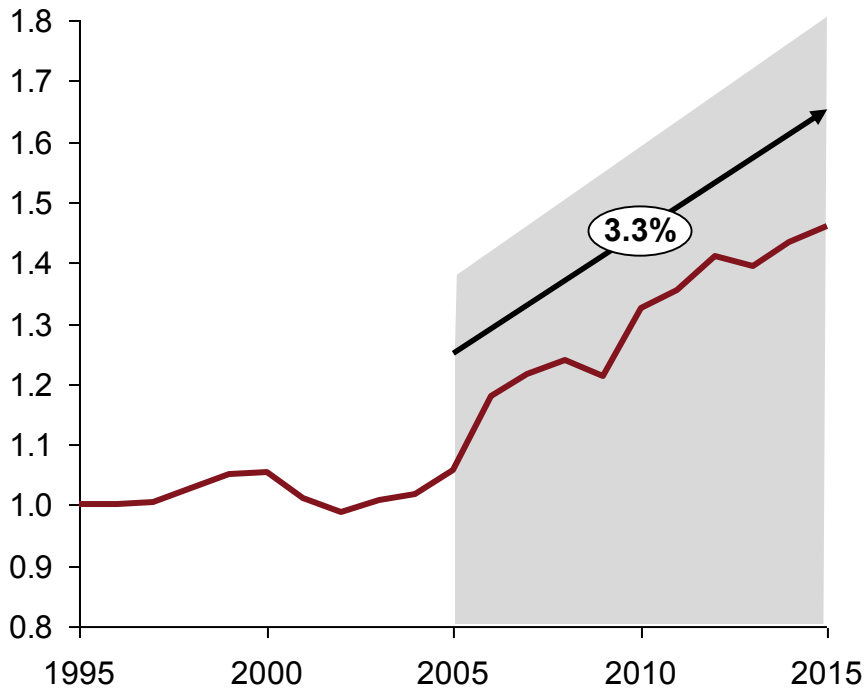
- Large vertically integrated utility initiated O&M cost savings initiative with goal of keeping nominal base O&M expenses flat
- O&M reductions achieved throughout the business through focus on four key areas:
 - *Technology deployment*
 - *Operational efficiency*
 - *Generation modernization*
 - *Staffing levels*
- A formal performance improvement initiative led to a 15% decline in O&M / customer since 2010

Note: Adjusted O&M removes uncollectibles, transmission for others, and pension and benefits
Source: Company filings, SNL, Strategy& analysis

Relative Cost Position

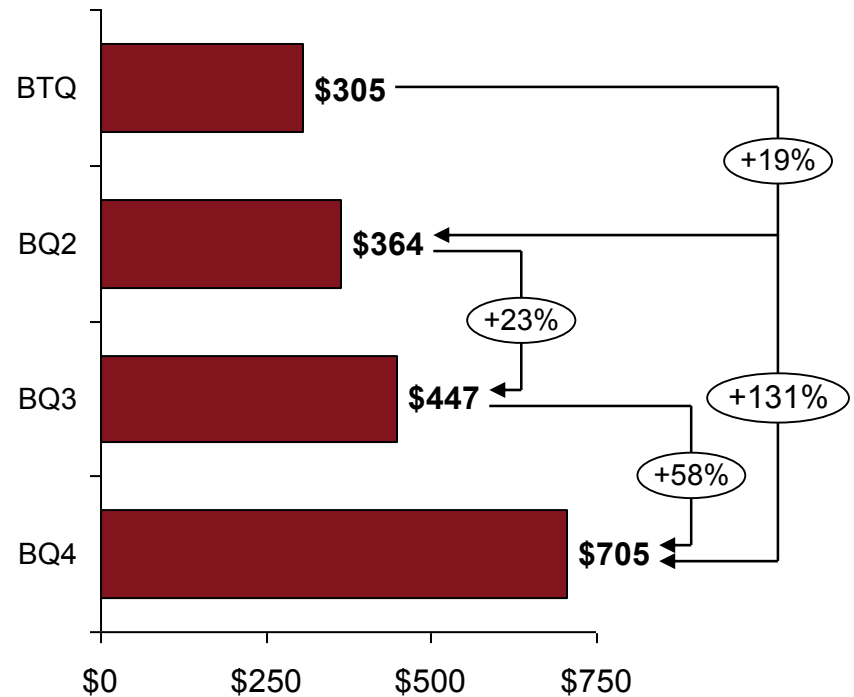
Total Non-Generation O&M¹

Index 2015 dollars, indexed (1995 = 1)



Total Non-Generation O&M/Customer¹













Fiscal Year 2015



Notes:
 1) Peer group reflects consolidated performance of utility HoldCos or independent OpCos
 2) O&M adjusted for inflation using historical inflation rates for the US; company set includes only those with reported O&M data for all years with extreme outliers excluded
 Source: SNL, Strategy& analysis

Drivers for Consolidation

Transaction Rationale

	Date	Premium	Balance Sheet Strength	Succession Challenges	Portfolio Balance	Segment Focus	Growth Platform	Risk Diversity	Opportunistic
	Feb 2012	11%	▨	▨	▨	▨	▨	▨	▨
	May 2013	21%				▨	▨		
	Dec 2013	32%		▨		▨	▨		
	Apr 2014	25%	▨		▨			▨	▨
	Jun 2014	17%	▨	▨	▨		▨		
	Dec 2014	21%			▨		▨		▨
	Feb 2015	19%		▨		▨	▨	▨	▨
	Aug 2015	36%			▨	▨	▨	▨	▨
	Sep 2015	49%			▨	▨	▨	▨	▨
	Oct 2015	42%					▨		▨
	May 2016	36%				▨	▨		▨
	Jan 2017	28% ¹			▨	▨	▨	▨	▨

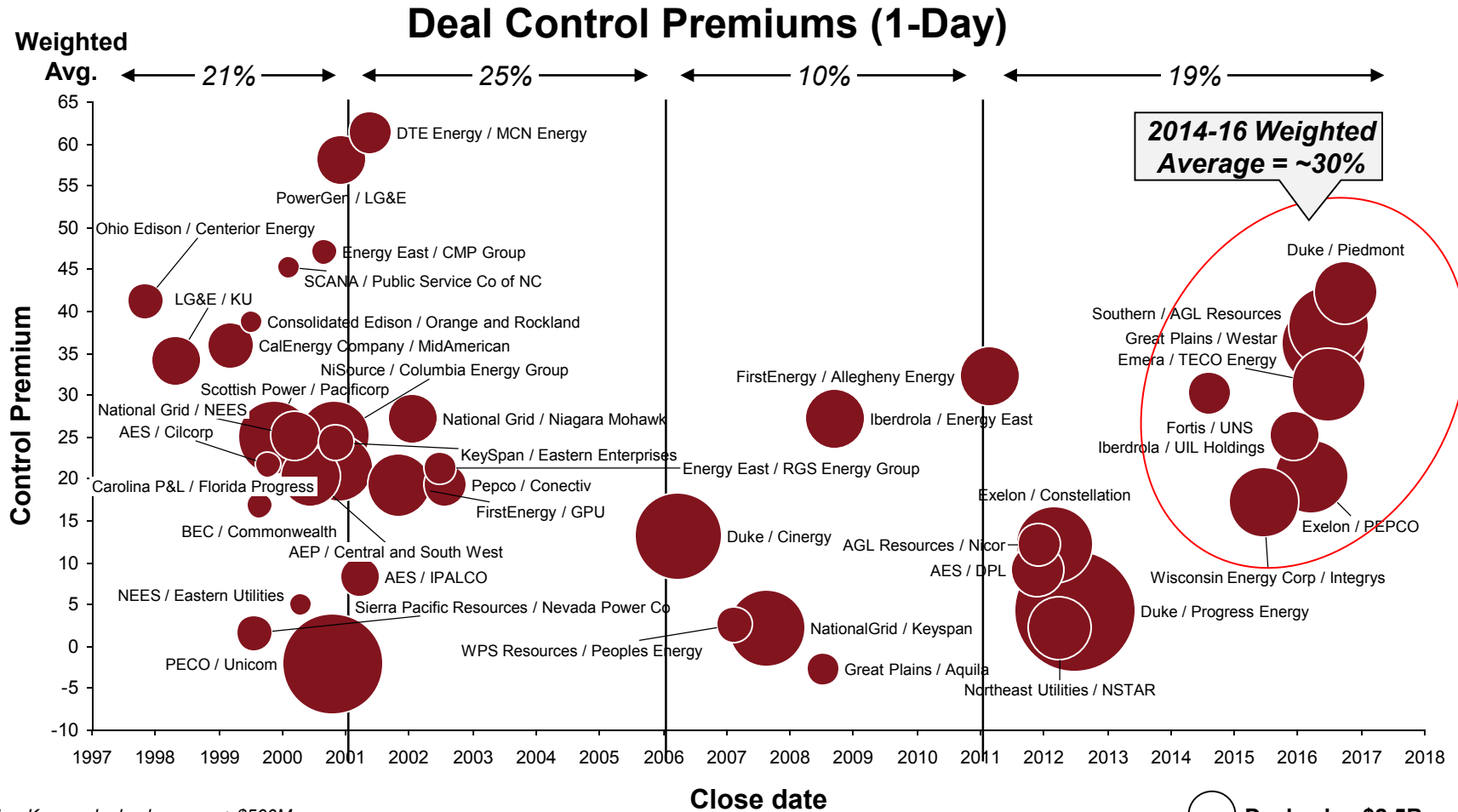
1) Based on closing price as of 11/28/16 prior to merger discussion announcements, 12% premium based on closing price as of 1/24/17

Geography Not A Constraint



NCE-NSP	700 miles	Exelon-Constellation	600 miles	Duke-Westcoast Energy / Union Gas...	900 miles
AEP-CSW	900 miles	PPL-LG&E	575 miles	TECO-New Mexico Gas Company....	1,500 miles
Duke-Cinergy	350 miles	Laclede Gas – Altagasco	400 miles	Emera – TECO Energy	1,550 miles
NextEra – HEI	5,000 miles	MidAmerican – NV Energy ...	1,200 miles	Fortis – UniSource	3,100 miles
MidAmerican – PacifiCorp ...	1,500 miles	Sempra-Mobile Gas	1,700 miles	Exelon-PEPCO	600 miles
Unicom-PECO	650 miles	NextEra – Oncor	1,100 miles	AltaGas – WGL	2,000 miles

Return to High Control Premiums



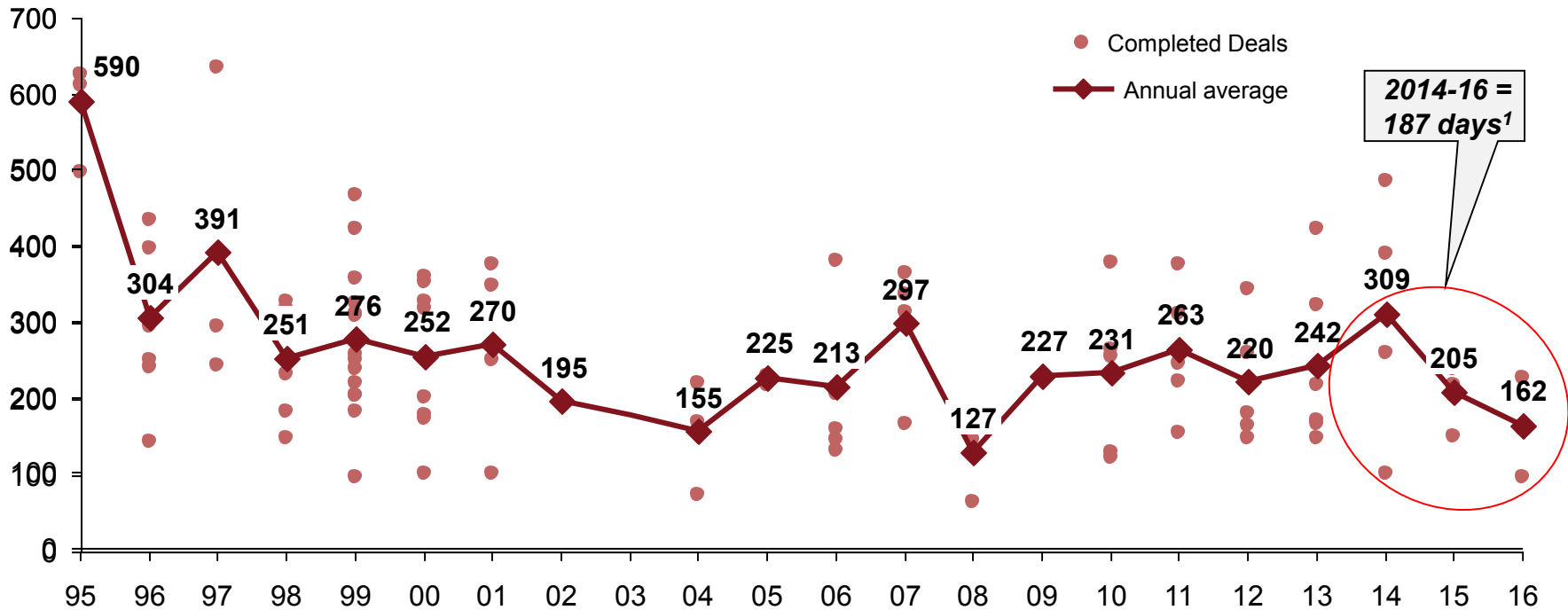
Note: Known deal values over >\$500M
 Source: Capital IQ, Investment banks reviews, Corporate reports

Regulatory Approval Durations

Announcement Time to Close

1995-2016, in Business Days

Business Days



1) Excluding outliers (i.e., Exelon / Pepco, Macquarie / Cleco)
Source: S&P Capital IQ, SNL, company news releases, Strategy& analysis

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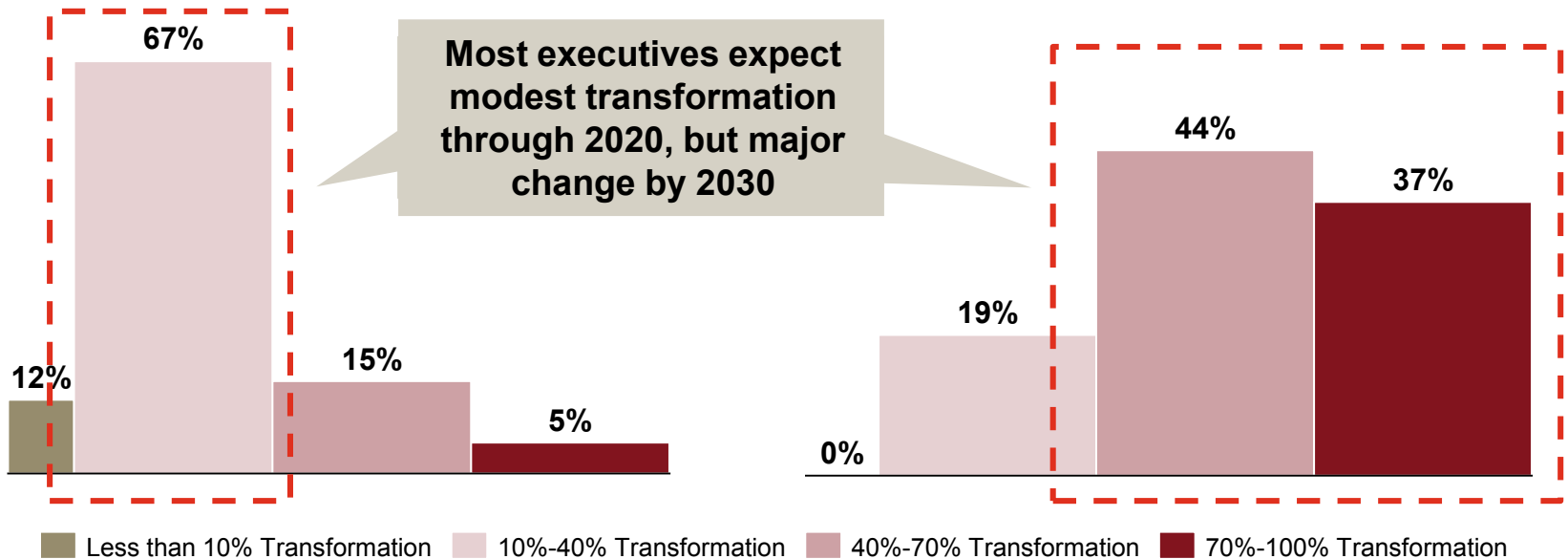
The C-Suite Expects Change

Extent of Energy Transformation

% Respondents; Global

By 2020

By 2030

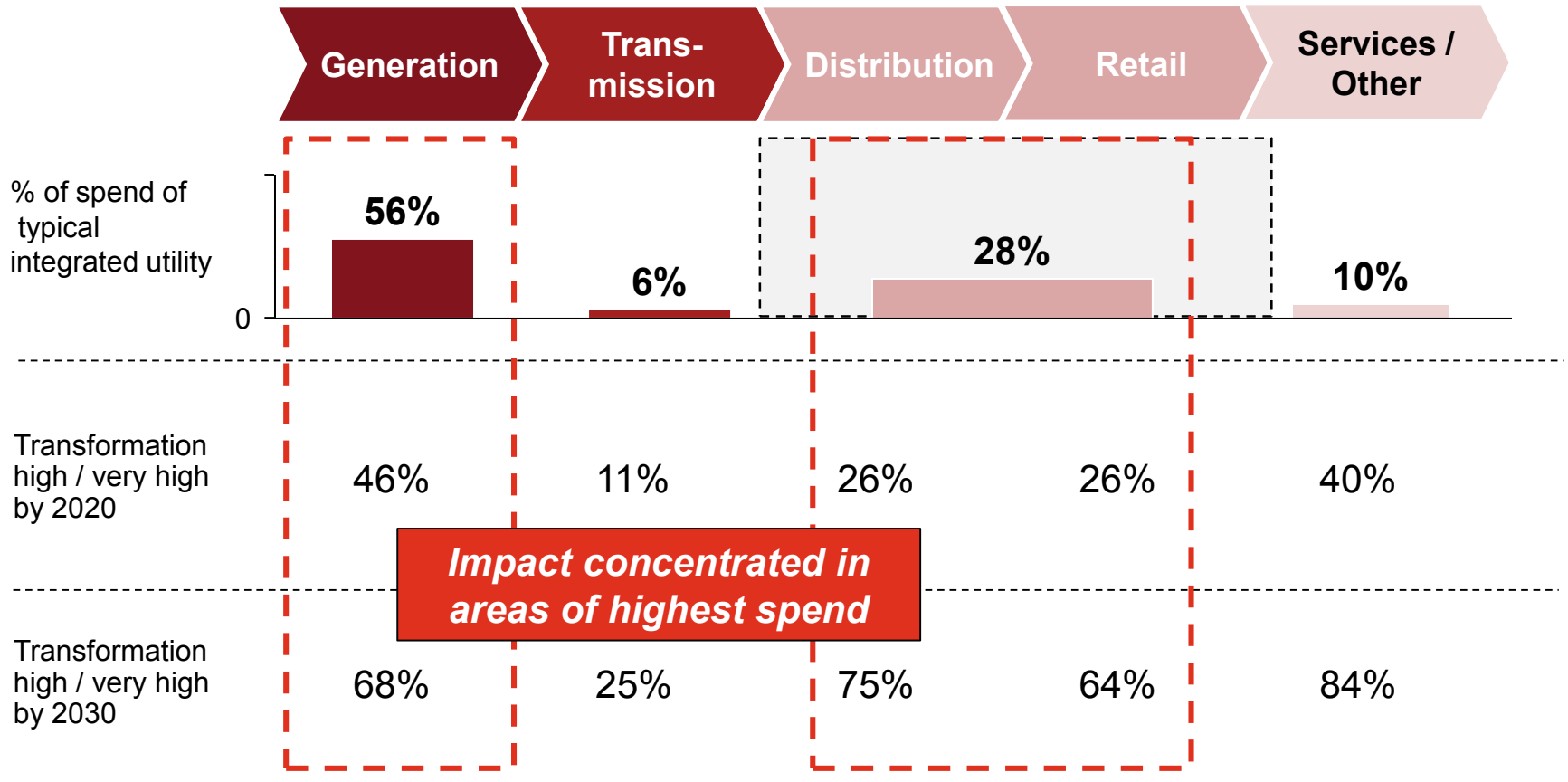


PwC interviewed senior Power and Utilities executives in 70 companies and 52 different countries about the future of their industry

Drivers for transformation include: changes in regulatory direction, technological advances, new energy sources, growth of distributed generation, new forms of competition, and changes in customer behavior

Source: 14th PwC Global Power & Utilities Survey, Strategy & analysis

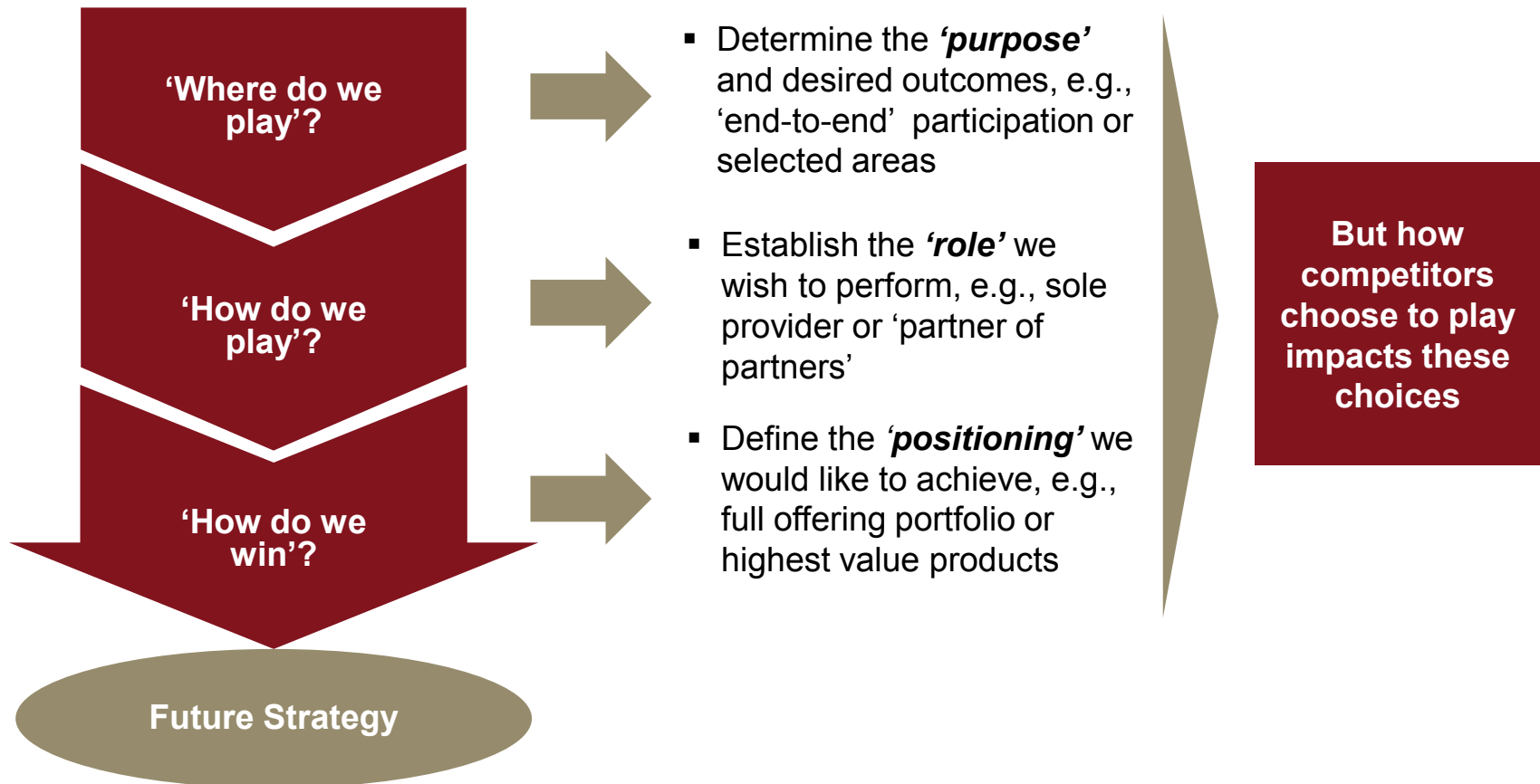
Expectations for Change Impacts



Source: Southern California Edison, 14th PwC Global Power & Utilities Survey, Strategy& analysis

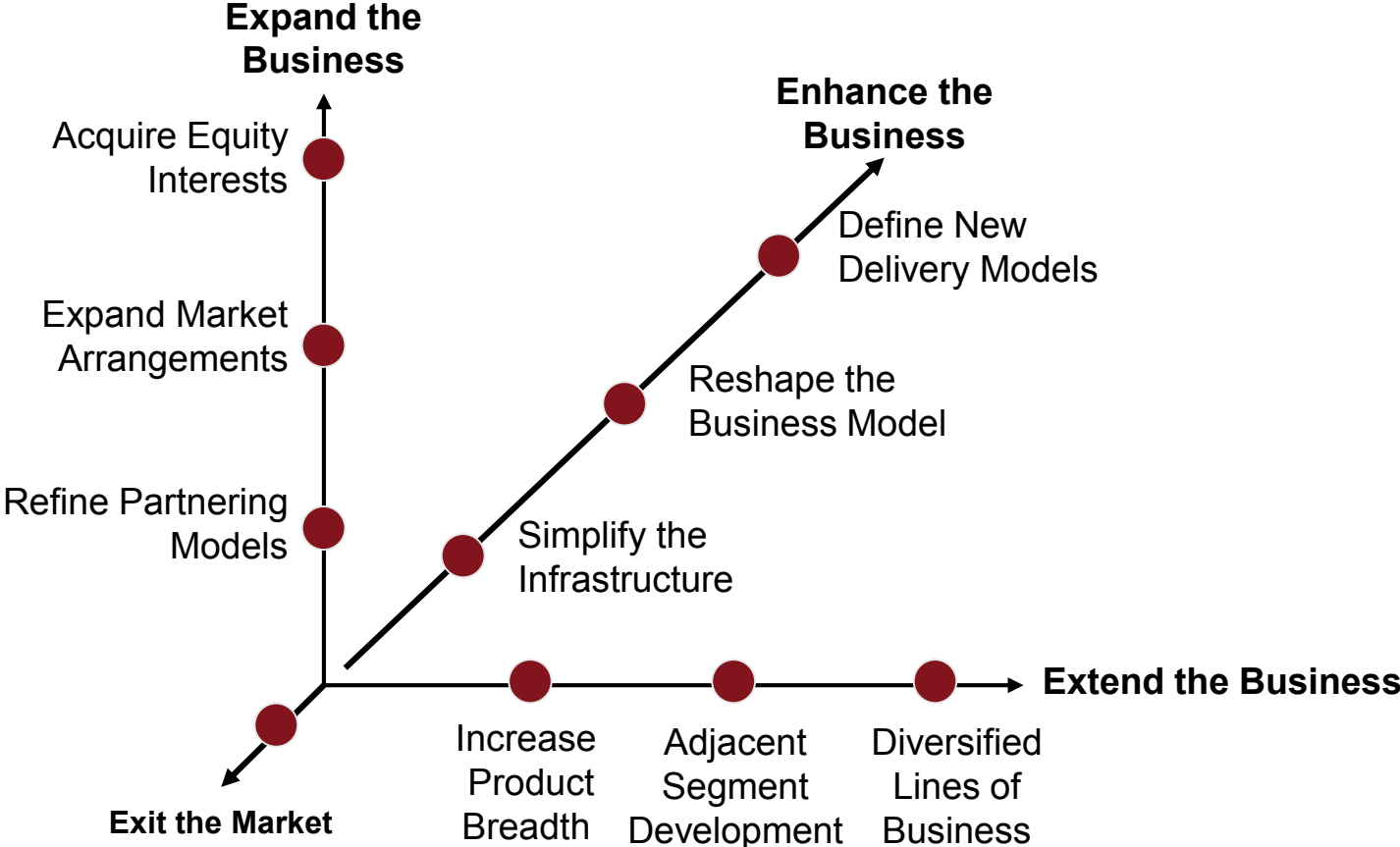
Utility Positioning Model

Customer Success Factors



Strategic Choices for Utilities

Defining 'Where to Play'



Broadened Market Participation

EIX acquires SoCore, distributed C&I solar (2013)

As part of a 1.8 MW/4 MWh VPP, ED owns and operates B-t-M energy storage. Customer pays monthly resiliency fee. (2015)

EXC offers no money down 15 year PPAs for 60MW of fuel cells across 200 commercial sites including Walmart (2014)

Entity	Lighting	BEMS	HVAC	Financing	CHP	Distributed Generation	Storage*	Energy Mgmt / Software	Energy Acquisition	DERMS
ConEdison										
Exelon										
Pepco <small>Potomac Electric Power Company</small>										
EDISON INTERNATIONAL™										
NEXTera ENERGY										
WGL Energy										
VECTREN										
nationalgrid										
Southern Company										

ED makes equity investment in Enbala, a leading DERM software provider for aggregating DERs (2015)

WGL to invest \$200m in DG systems in 2016. It has invested over \$500m in DG systems in 16 states to date.

NEE acquires Smart Energy Capital, distributed solar (2013)

Southern acquires PowerSecure for \$430M in 2016

* Storage deployed primarily as a grid asset not included as a ESCI activity

Business Model Shifts

