

nationalgrid

Massachusetts Electric

Investor Site Visit

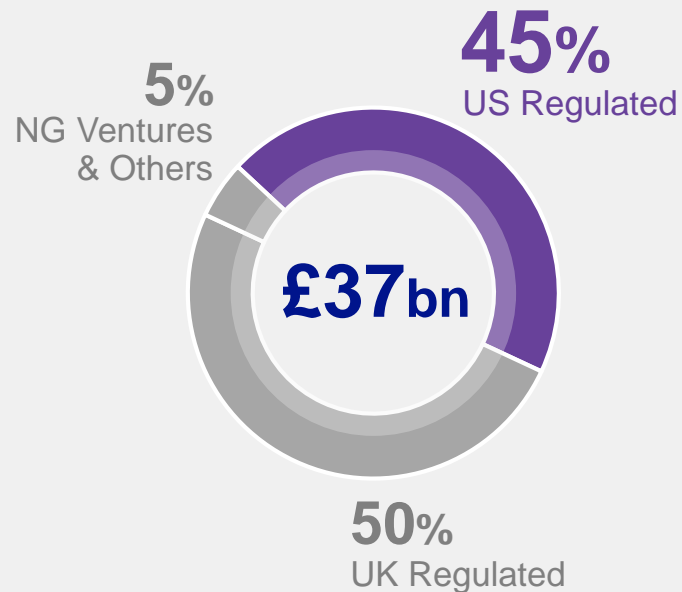
4 March 2019



The US is a fast growing part of our portfolio

TOTAL ASSETS

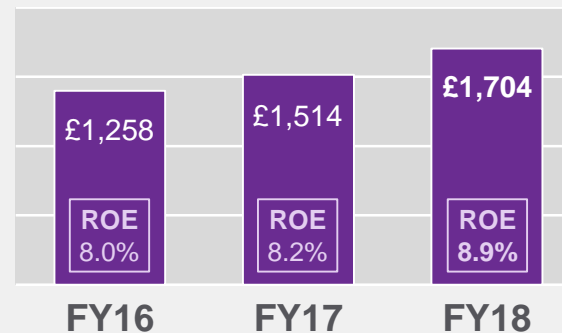
As at March 2018



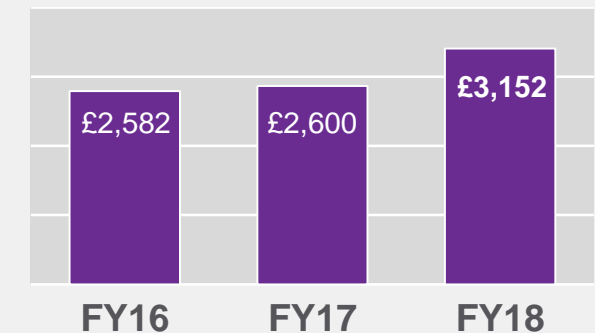
- Represents 45% of our asset portfolio
- Underscores our value proposition
 - attractive combination of asset growth and dividends
- While
 - delivering world-class operational and safety performance
 - maintaining a strong balance sheet
 - at the forefront of industry developments

US RECENT FINANCIAL PERFORMANCE

Underlying EBIT* (m)



Capex (m)



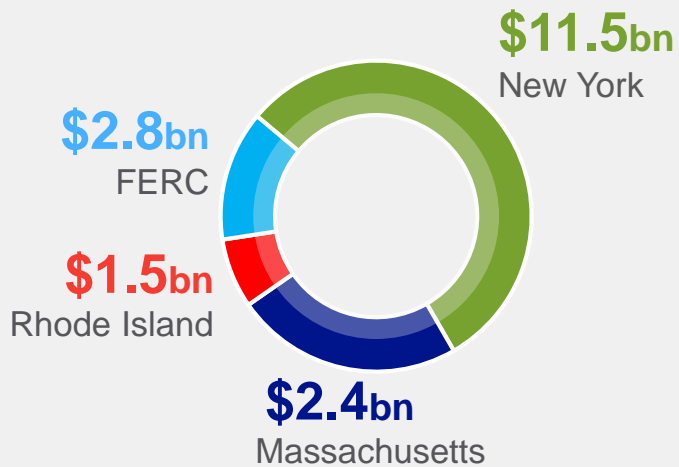
*Underlying EBIT excludes the impact of timing and FX

Overview by jurisdiction – FY18

\$20.7bn

US RATE BASE

As at March 2018

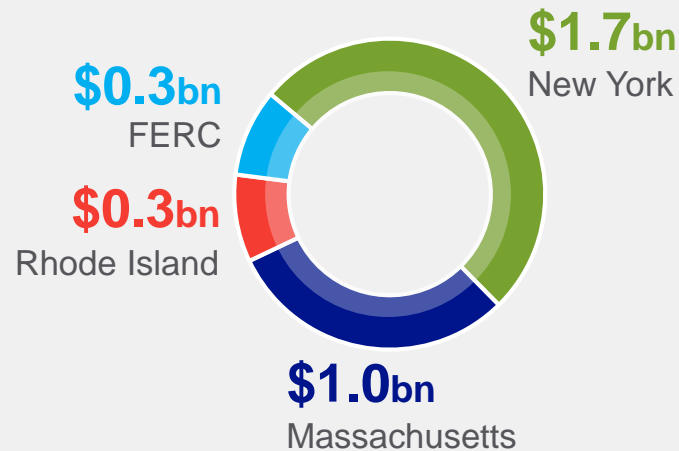


\$2.7bn of assets outside of rate base, including capital work in progress

\$3.3bn

CAPITAL INVESTMENT

For year ended March 2018



8.9%

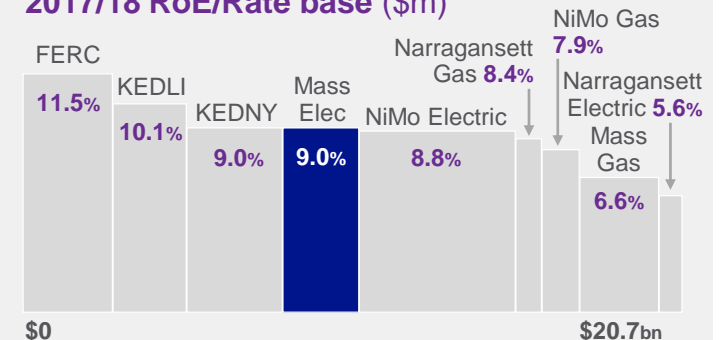
ACHIEVED ROE

For year ended March 2018

New York	9.0%
Massachusetts	7.8%
Rhode Island	6.9%
FERC	11.5%
US Overall	8.9%

(95% of RoE achieved)

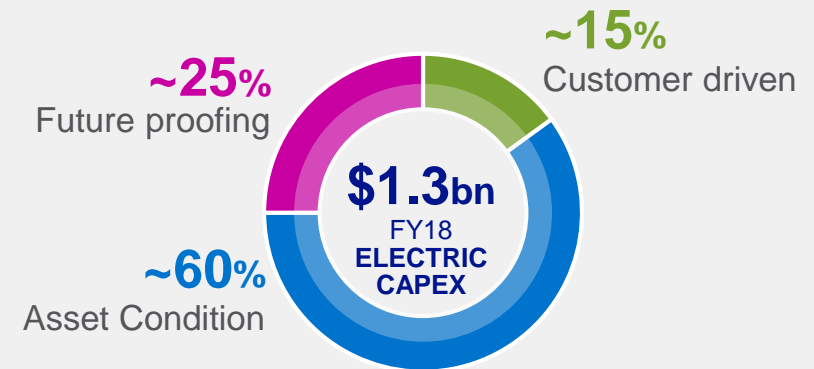
2017/18 RoE/Rate base (\$m)



Industry trends driving investment

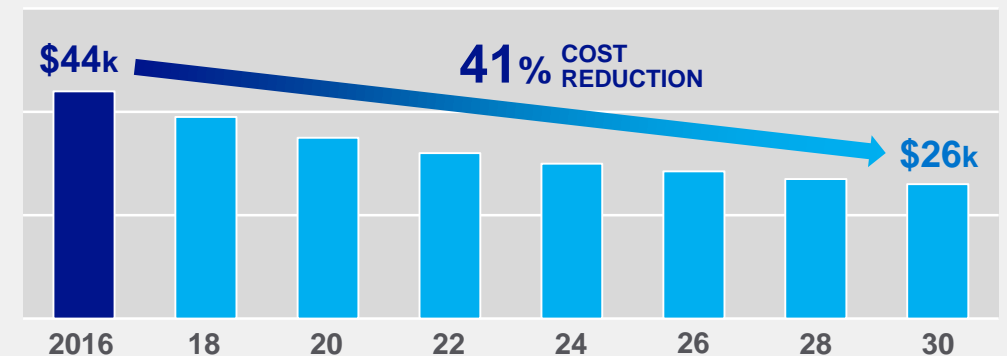
- Aging infrastructure
 - storm hardening/resilience
- Environmental policy – National Grid jurisdictions have aggressive CO₂ reduction targets
- Falling costs of renewables
- Changing customer needs
 - 7m accounts representing 20m people
 - digitization has driven increased customer interaction
 - customers are looking for better charging infrastructure and believe utilities should lead

ELECTRIC INVESTMENT DRIVERS



EV COSTS EXPECTED TO DECLINE

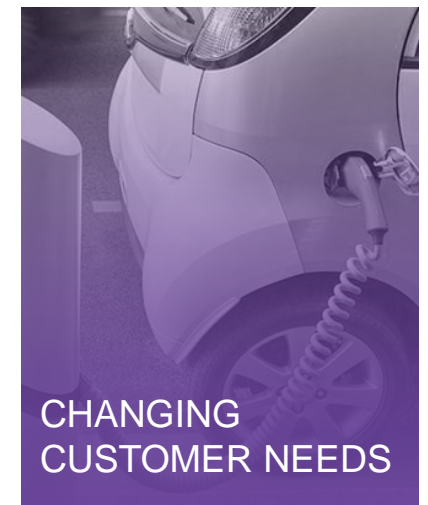
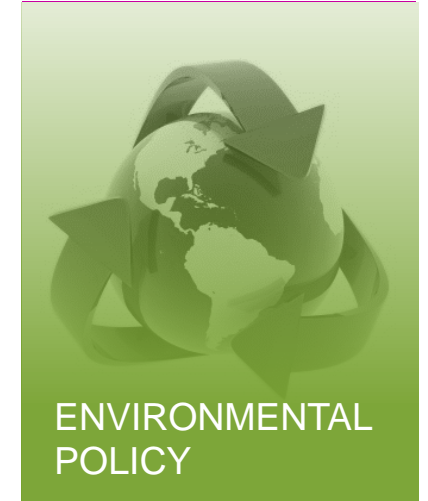
Average price per car



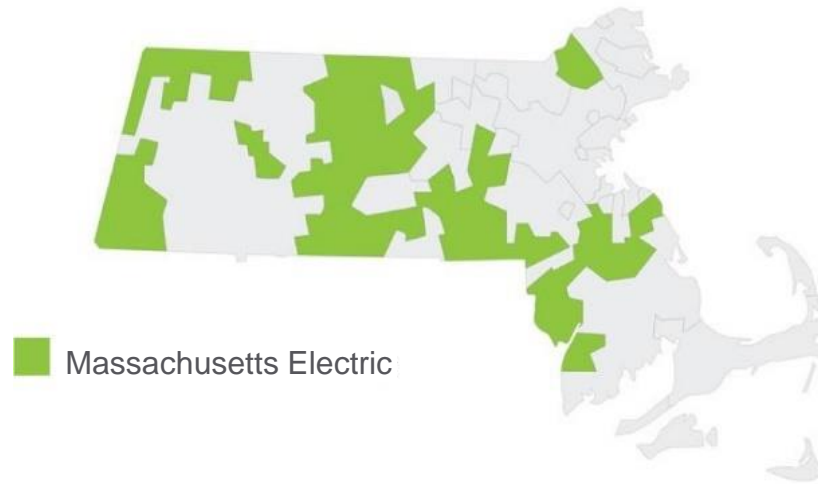
Source: Bloomberg New Energy Finance

Our strategic priorities

- Deliver world-class network reliability and safety performance
- Achieve returns as close as possible to the allowed
 - delivered 95% in FY18
- Disciplined investment in core networks
 - timely recovery of capex
- Propose new solutions for customers aligned to industry evolution

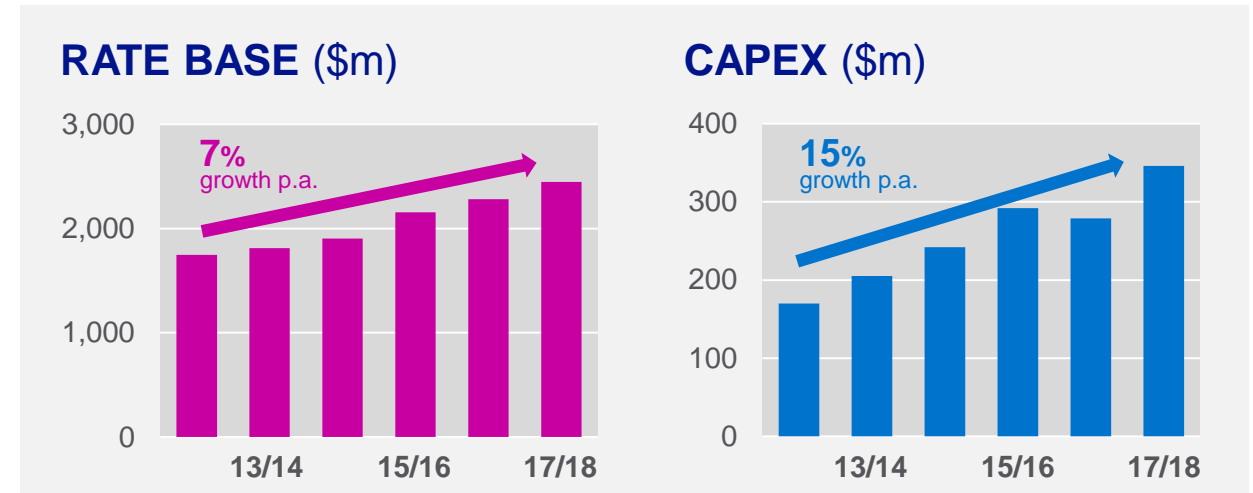


Massachusetts Electric – Business Overview



Massachusetts Electric distribution companies

- 1.3 million electric customers
- 5,000 employees in Massachusetts
- Over 13,000 miles of electric lines
- Regulated by Massachusetts Department of Public Utilities



Investment since 2016

- Improvements to underground facilities and upgrade substations
- Improved electric reliability and faster restoration during major storms/emergency events
- Increased interconnections of Distributed Generation
- Regulatory approval for a grid modernization proposal

New Massachusetts Electric rate filing

Evolving the regulatory deal

- National Grid re-filed for Massachusetts Electric in November 2018
- Commission order expected September 2019, with new rates effective October 2019
- Key requests under this filing:

Requested financials

- Requested RoE 10.5%
- Debt:Equity 47%/53%
- Additional revenue of \$70m:
 - \$20m rate base return
 - \$50m increased operating expense

Requested capex

- Supports \$300m capex p.a.
- 5 year, \$167m investment in EV charging infrastructure
 - increasing charging ports by over 17,000 in Massachusetts
- \$50m in utility scale energy storage, ownership of 14MW

Requested new mechanisms

- Performance Based Rate Mechanism (PBRM)
- I-x approach (I = inflation, x = productivity factor)
- Would fund both capex and opex
- Ensures inflation factored into cost base

Five-year rate plan requested (Oct 2019 to Oct 2024)

Today's visit

Leading the development of tomorrow's networks

Northboro Operations

Transmission Control, Security Operations Center and Solar & Storage Program

13.15 Tour of electric transmission control cyber security operations centers

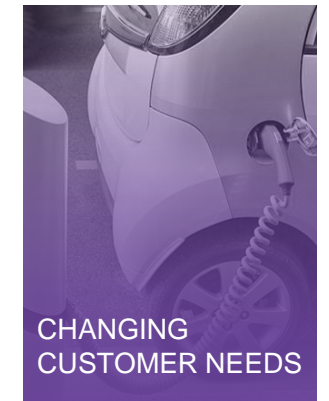
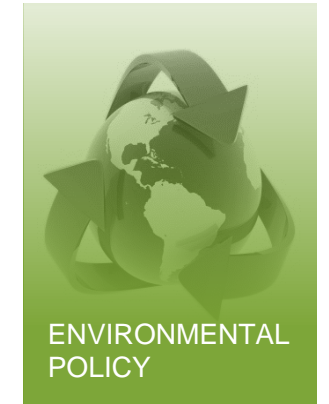
13.45 Solar & Storage Program – Tour of the NBRO canopy

Vionx Battery Storage & Wind Turbine - Worcester

14.40 DOE Project for interconnecting a vanadium flow battery, private wind turbine and smart grid investments

Smart Grid & Grid Modernisation / Electrification of Transportation - Millbury

15.20 Detailed end-to-end view of National Grid's smart grid approach, grid modernization strategy & the electrification of transportation



Evolve for the future

nationalgrid

Q&A

