Emera

$29b
Assets

$4.3b
Revenues

7,400
Employees

2.5m
Utility Customers
Emera Operations

- Emera Newfoundland & Labrador
- Emera New Brunswick
- Emera Maine
- Emera Energy
- Nova Scotia Power
- Emera Gas Grand Bahama Power
- Tampa Electric/Peoples Gas
- DOMLEC
- LUCELEC
- Barbados Light & Power
- New Mexico Gas
Our Vision

Cleaner Electricity Used for More Purposes
- more *renewable generation*
- better *regional transmission* connections
- *electrification* of home heating and transportation

Results
Permanent, *economy-wide emissions reductions*
- aligned with Canada’s COP21 commitments

Regional Sharing and Optimization of Cleaner Electricity
- between *neighbouring provinces and states* in northeastern North America

*Collaboration and Innovation* that creates clean energy jobs
- and helps make Atlantic Canada competitive with neighbouring jurisdictions
Alignment With Emera Strategy

MARKET OPPORTUNITY:
Demand For Cleaner Affordable Energy

DRIVERS
• Environmental Regs & Standards
• Social & Political Demand
• Fuel-Source Diversification
• Energy Independence & Stability

EMERA STRATEGY:
Leverage the unique linkages and adjacencies of Emera’s assets, capabilities & relationships to create growth and development opportunities.

FOCUS
• Renewables
• Transmission (renewables to market)
• Gas Generation and Transportation
• Utilities

STRATEGIC INITIATIVES:
Maritime Link and Labrador Island Link
New England Transmission
New England Gas Generation
TECO Energy Acquisition
‘Fuel to Assets’ Projects
‘Greening’ of Generation
Creating the Grid of the Future

Points of alignment within Emera’s long-term strategy
Nova Scotia Power

• Wholly owned subsidiary of Emera Inc.
• Primary electric utility serving Nova Scotia
• 500,000 customers
• 1,700 employees covering the province
• $279 Million in Capital Expenditures in Nova Scotia in 2016
Progress in Nova Scotia

Compared to 2005

**CO₂ EMISSIONS**
- 34%

**RENEWABLE ENERGY**
- Extensive build out of wind and renewable investments

**COAL FIRED GENERATION**
- 31%

More than 3.6 Mt reduction in emissions since 2010

Equivalent to the closure of 3 coal units
Legislative and Regulatory Drivers

Provincial Renewable Electricity Regulations
- 25% in 2015; 40% in 2020
  - IPPs / NSPI Wind
  - COMFIT
  - Tidal FIT
  - Biomass
  - Maritime Link

Provincial Air Emissions Hard Cap Regulations
- (CO$_2$, NO$_x$, SO$_2$, Hg)

Federal Coal Regulations & related Equivalency Agreement

Energy Efficiency (~130GWh/year)
The Future – Coal to Clean

“Coal to Clean” strategy would deliver on national goals

- Use existing coal-fired generation, but less and less over time
- No coal generation in Nova Scotia possible post-2041 **

** With transmission in place, Upper and Lower Churchill resources available for Maritimes/Canada to further reduce GHG emissions

- Regional Transmission
- Renewables
- Electrification
- Flexibility
- Tariff Reforms
- Collaboration
Managing the Grid

Source: nspower.ca/todayspower
Gas: not a ‘bridge’ in Atlantic Canada
Extending the Progress

Nova Scotia Power Carbon Emission Reductions

- Actuals (CO2e kt)
- Legislated Caps
- 30% Reduction from 2005
Future - Interconnections

Maritime Link

Atlantic Link-
proposed 563km, 900 MW subsea transmission project.
Future - Interconnections

North America Eastern Energy Loop

Legend
- Gull Island Hydro
- La Romaine Hydro Complex
- New Wind in NL, NB, and Maine
- Maritime Link
- Labrador Island Link (Naïcor/Emersa)
- AC Transmission Line (Naïcor)
- Existing Infrastructure
- Subsea Component of Link
- New HVDC link from Maritimes to Boston
New England = Opportunity

- *Stronger transmission connections* between eastern Canada and New England (and New York)
  - Increases use of Canadian hydro (NL, QC)
  - Large market for wind energy from the Maritimes, NL and QC, tidal energy from the Maritimes

- Build a strong *U.S. market for non-emitting generation* in Canada
  - Challenging for Atlantic Canada to build necessary infrastructure alone: exports help pay for new clean energy infrastructure (generation and transmission)

- *“Gas by wire” from New England* could enable transition in Atlantic Canada to a non-emitting electricity sector
  - New transmission infrastructure would enable access to natural gas-fired generation in New England, where there is an over-supply of gas plants
Future - Electrification

Clean Energy
- More wind
- More hydro, more accessible
- Grid-scale solar
- Residential solar
- Tidal energy

Electrification
- Electric vehicles (including commercial)
- Regional EV charging networks
- Electric heat pumps replace oil heating

Grid Intelligence
- Load demand shifting (PowerShift Atlantic)
- Use of metering technology to support clean energy expansion and electrification
Vision and Opportunity
- Nova Scotia and Canada as global leaders in tidal development

Goals
- Build a thriving tidal industry in Nova Scotia
- Regional economic growth
- 4MW tidal array this year; 50 MW by 2020
Summary

• We have a demonstrated track-record of achieving real GHG reductions
• Gas is not a solution for Nova Scotia
• Regional transmission connections and access to large-scale hydro are needed
• We want to be part of the solution for a low carbon, electrified future
• We want to ensure rate stability