

PETERBOROUGH DISTRIBUTION INC. SALE REVIEW

PREPARED FOR
THE CITY OF PETERBOROUGH

SEPTEMBER 6, 2016

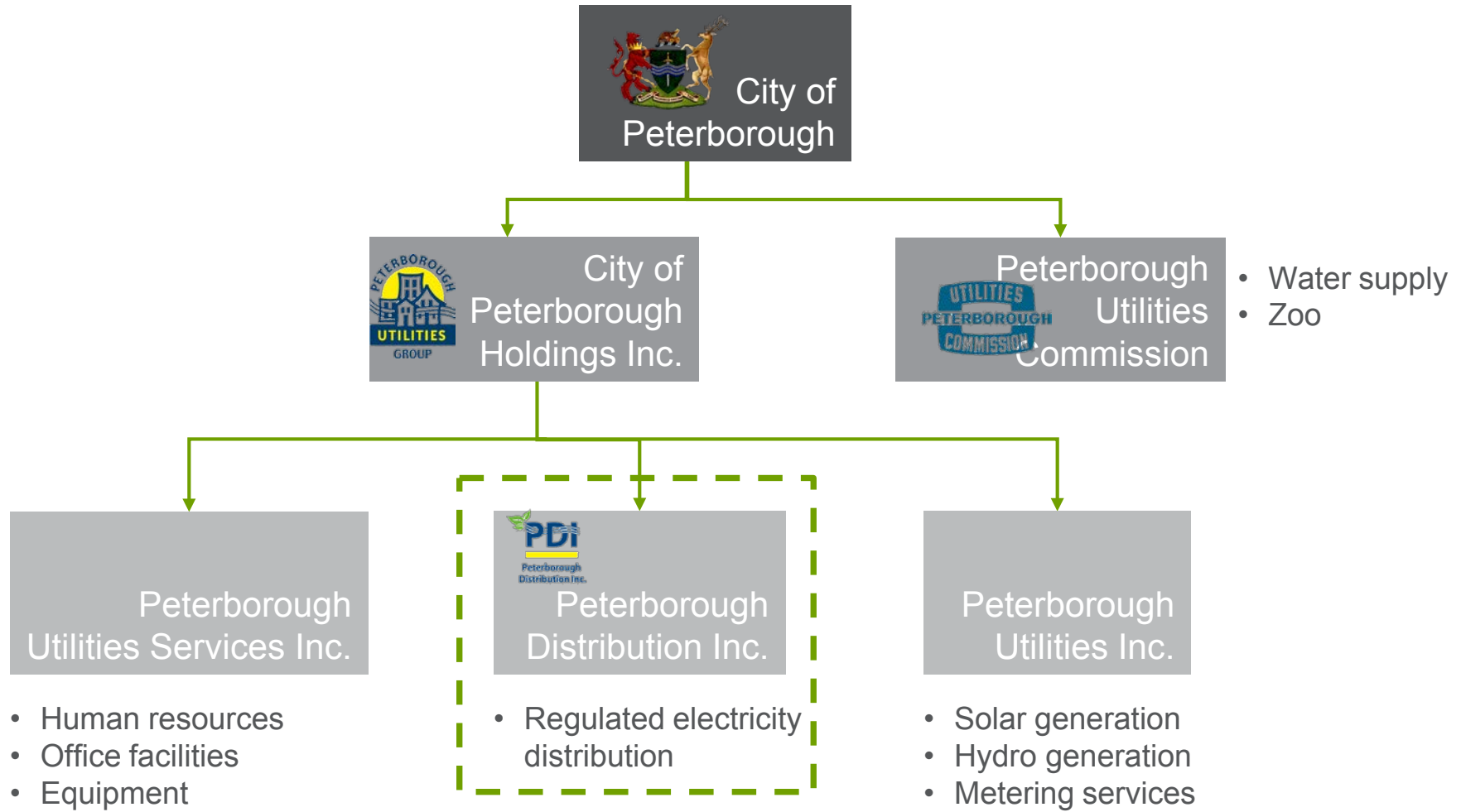
THE ASK FROM PETERBOROUGH

The City of Peterborough is seeking independent advice as it considers a potential sale of Peterborough Distribution Inc.

Topics to explore in this session

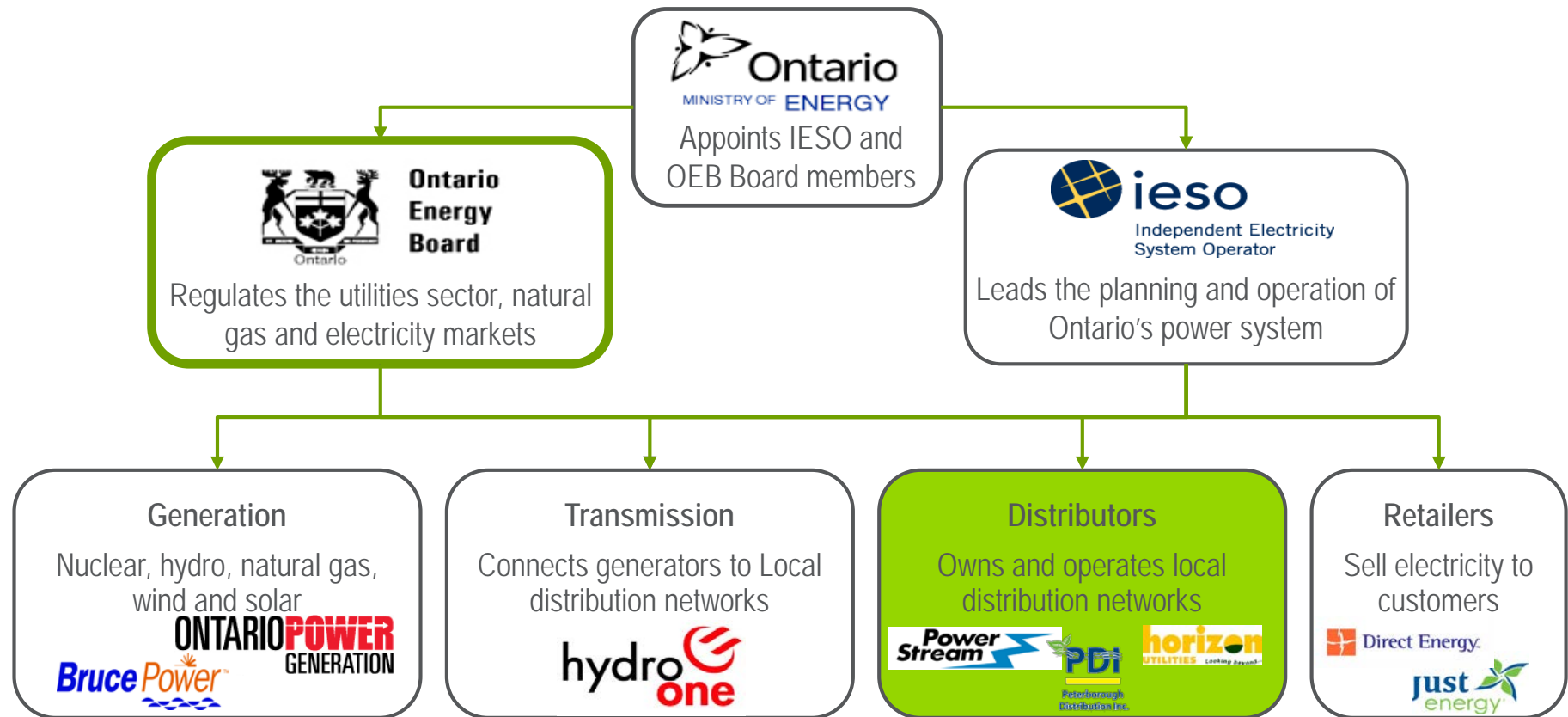
1. The outlook for medium-sized Local Distribution Companies (LDCs) given expected policy, regulatory, technology and market developments
2. The various taxes that would apply to a potential transaction
3. Current market prices for electric utilities
4. A proposed decision framework for the city
5. Other options for PDI

BUSINESS OVERVIEW



ONTARIO ELECTRICITY INDUSTRY STRUCTURE

The Ontario Energy Board is the regulator that approves electricity distribution rates regardless of public or private ownership



BUSINESS OVERVIEW: PDI

CUSTOMERS / NETWORK

- Total : 36,317
- Total Service Area : 64 sq. km
- Total km of line : 563

FINANCIAL

- Annual Revenue : \$15,396,137
- Net Income : \$1,600,702
- Total Assets : \$89,788,796
- Return on equity : 5.43%
- Return on Assets : 1.78%

Data as of December 31, 2015

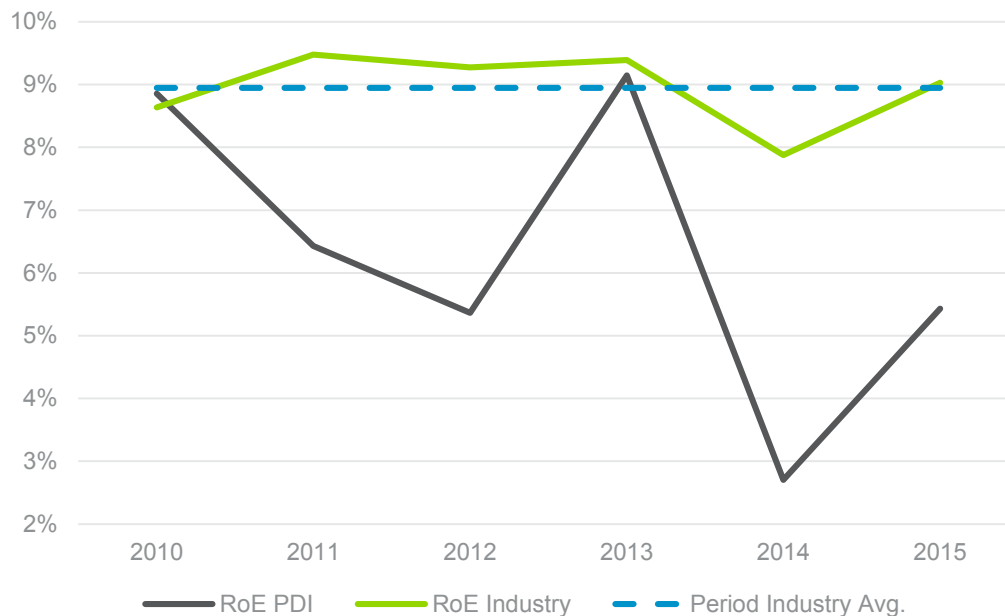
Distributions from PDI to COPHI

- Interest: \$4.25 million since 2010
- Dividends: \$8.4 million since 2010

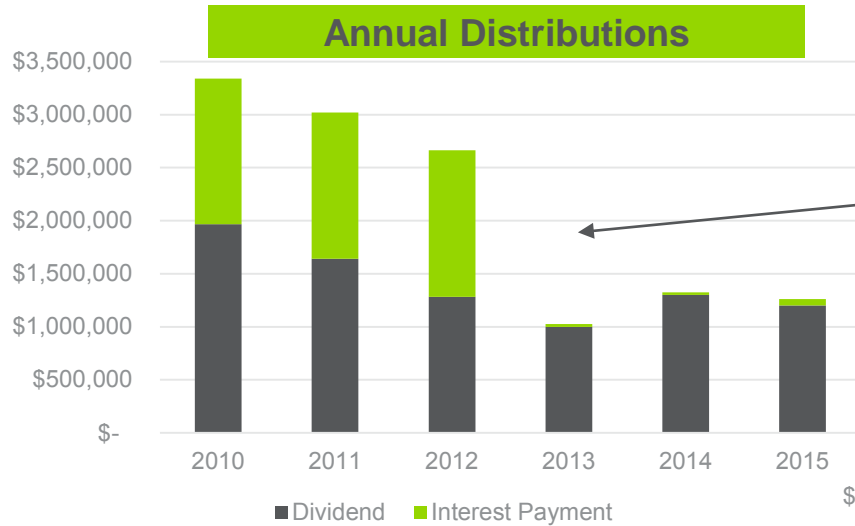
Distributions from COPHI to City

- Interest: \$13.12 million since 2010
- Dividends: \$17.42 million since 2010

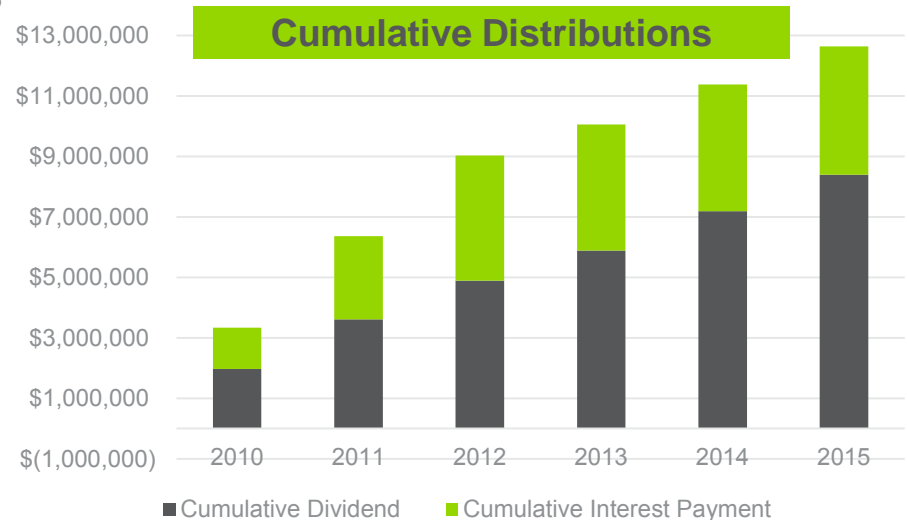
Data as of December 31, 2015



DISTRIBUTIONS FROM PDI



Significant drop in interest payment reflects restructuring of PDI shareholder debt. This debt was converted to equity and was then used to invest in entities external to PDI (for example, solar PV through PUI)



Data as of December 31, 2015



INDUSTRY TRENDS AND OUTLOOK

GLOBAL ELECTRICITY TRENDS

DISRUPTIVE TRIGGERS



Regulation and Policy

- Carbon mitigation
- Shifting utility regulatory models
- Flexibility
- Renewables promotion
- DER adoption



Market Demand

- Control
- Choice
- Sustainability
- Accessibility



Technology Innovation

- Affordability
- Digitalization
- Networking and data analytics
- Integration

GLOBAL ELECTRICITY TRENDS

DISRUPTIVE TRIGGERS



Regulation and Policy

- **Carbon mitigation:** Carbon pricing mechanisms, policies, and investments (e.g., Cap and trade, Climate Change Action Plan, US Clean Power Plan, COP21)
- **Shifting utility regulatory models:** Incentive-based regulation
- **Flexibility:** Promotion of distribution system operators, support for energy storage, support for intra- and international interconnection
- **Renewables promotion:** Purchase / production requirements (e.g. Renewable Portfolio Standards, Renewable Energy Directive), tax incentives (e.g., accelerated depreciation)
- **DER adoption:** Pricing mechanisms and policies (e.g., Net metering, feed-in tariffs, Solar Renewable Energy Credits)



Market Demand

- **Control:** More customers demanding control over their electricity usage and spend
- **Choice:** More customers want the ability to purchase green power or self-generate and sell that power back to the grid
- **Sustainability:** Marketplace differentiation and brand awareness
- **Accessibility:** More options available to greater share of end-use customers



Technology Innovation

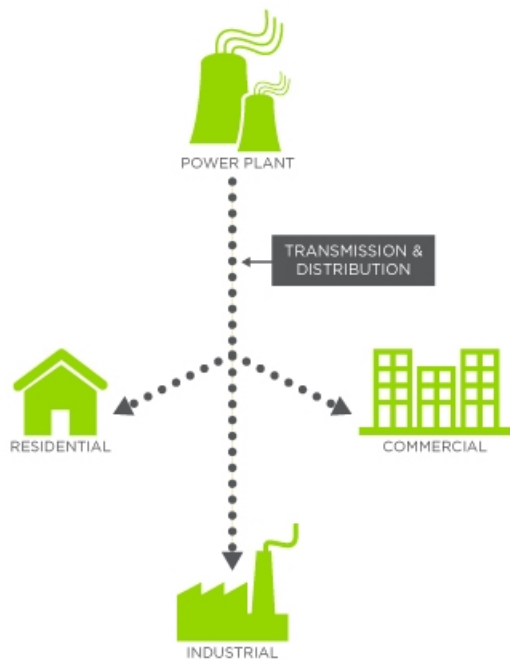
- **Affordability:** Declining cost of ownership for solar PV, energy storage, and other demand-side technologies
- **Digitalization:** Lowering the barrier for entry for innovative solutions
- **Networking and data analytics:** Harnessing distributed computing and data across the grid
- **Integration:** Pairing of complementary disruptive technologies (e.g., solar + storage)

GLOBAL ELECTRICITY TRENDS

THE ENERGY CLOUD^{1,2}

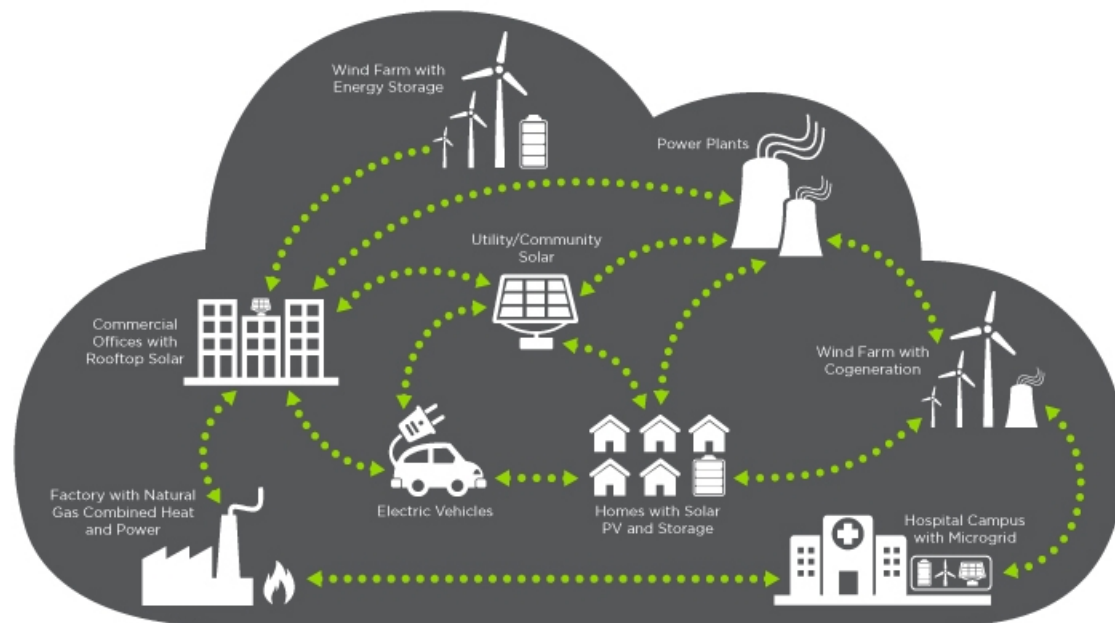
TODAY: TRADITIONAL POWER GRID

Central, One-Way Power System



EMERGING: THE ENERGY CLOUD

Distributed, Two-Way Power Flows



©2016 Navigant Consulting Ltd. All rights reserved.

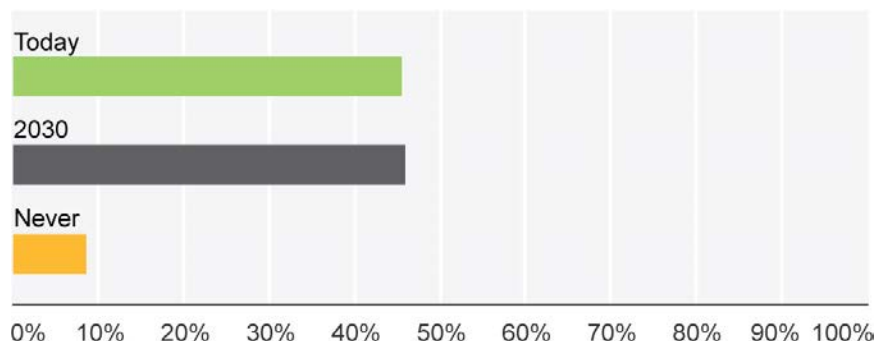
¹ The Energy Cloud: Emerging Opportunities on the Decentralized Grid ([white paper](#))

² Navigating the Energy Transformation: Building a Competitive Advantage for Energy Cloud 2.0 ([white paper](#))

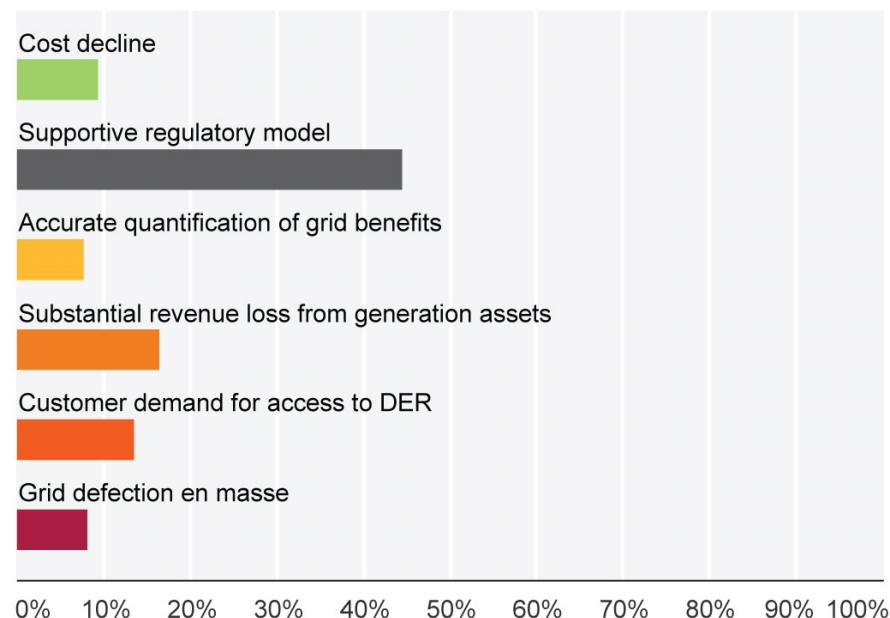
GLOBAL ELECTRICITY TRENDS

STATE & FUTURE OF THE POWER INDUSTRY¹

When will the **growth of Distributed Energy Resources (DER)** force a major shift in the utility business models?



What is the **most important tipping point** for utilities to aggressively pursue owning and operating DER?

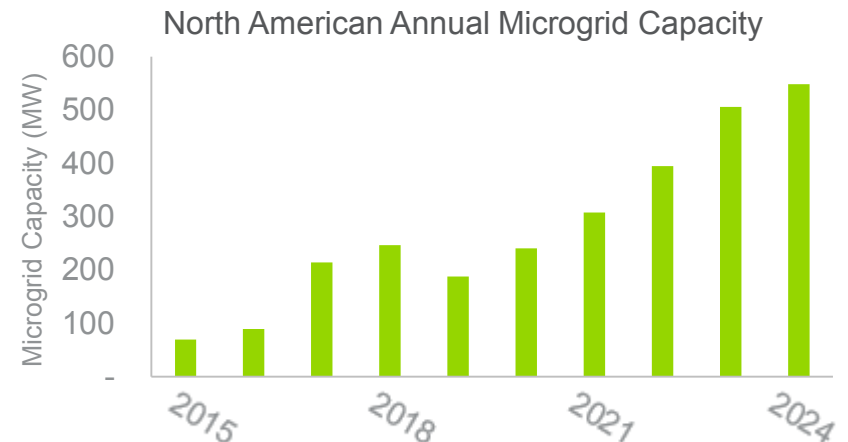
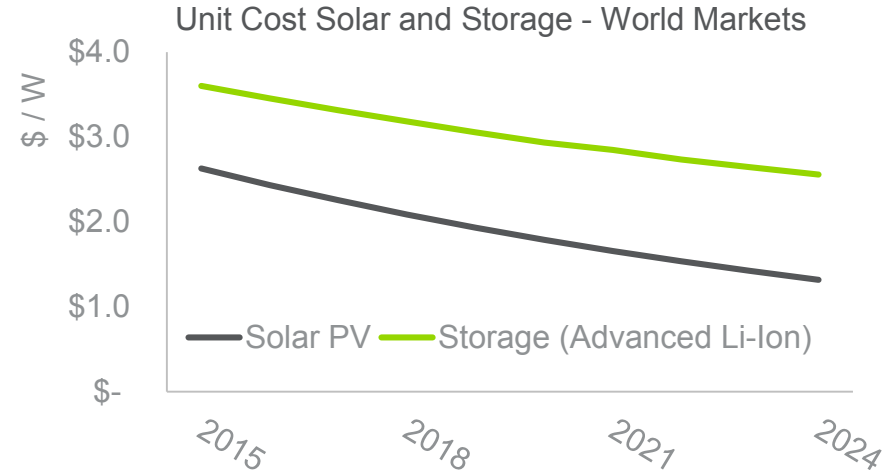


¹ State and Future of the Power Industry ([special report](#))

INDUSTRY TREND #1: DISTRIBUTED GENERATION

Customers are seeking alternatives to traditional grid-supplied electricity

- The cost of alternatives like solar and storage continue to decline
 - Ontario is revisiting net metering to provide additional incentives
 - 25 microgrid projects in Ontario
- The cost of grid supplied energy is increasing
- Commercial and institutional customers (e.g. WalMart, Honda, Costco) are sourcing their own electricity
- In general, electricity end uses are becoming more efficient



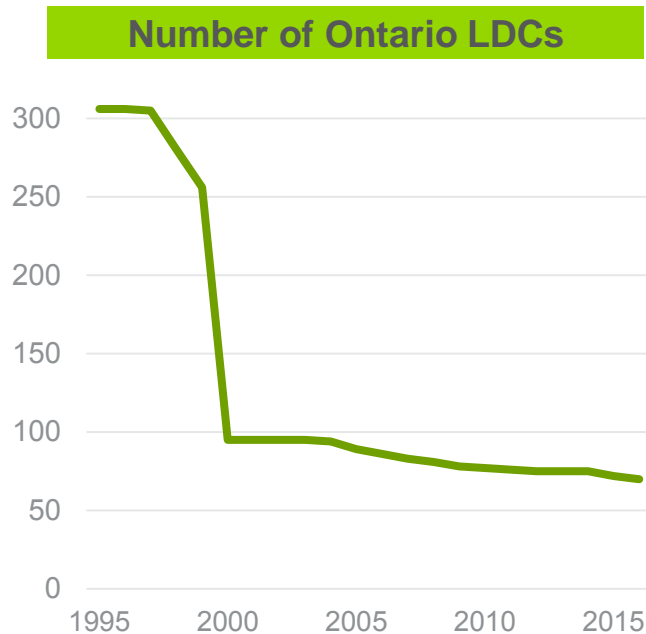
INDUSTRY TREND #2: SECTOR CONSOLIDATION

As LDCs search for growth, scale and efficiencies, they look to mergers and acquisitions

- To compete within a changing marketplace, mergers and acquisitions provide additional resources and scale
- Ontario government is encouraging LDC consolidation through reduced transfer tax on proceeds of LDC sales to private companies
- MergeCo transaction (PowerStream, Enersource, Horizon and Hydro One Brampton) has sparked other merger and acquisition discussions across the province
 - Oshawa Hydro, Veridian and Whitby Hydro currently in merger discussions

INDUSTRY TREND #2: SECTOR CONSOLIDATION

The number of Ontario LDCs has decreased through consolidation and the 2015 Ontario budget introduced changes to encourage further consolidation.



* Less cumulative Payments-in-Lieu of Taxes (PILs) paid by the LDC

- Transfer tax rate on ***sale to privately-owned companies*** was reduced from 33% to 22%
 - For example, if sale price was \$100 million, transfer tax payable to the government of Ontario would be \$22 million*
 - Transfer tax ***does not apply on sale to other municipally-owned LDCs***
- Transfer tax rate set to 0% for municipal LDCs with fewer than 30,000 customers
- The capital gains tax rate set to 0% for municipally-owned LDCs
- The above measures will apply from **January 1, 2016 to December 31, 2018**

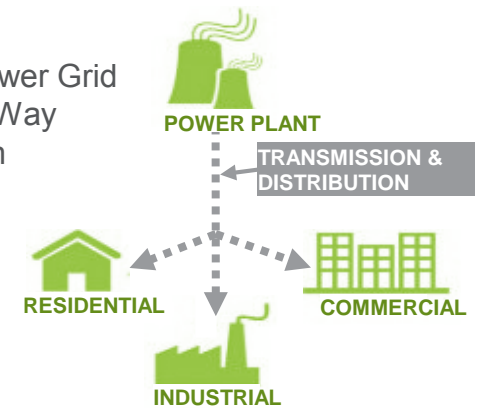
INDUSTRY TREND #3: SMARTER GRIDS

Technology is fueling a shift towards decentralised and smarter power systems

- Technology advancements have reduced costs and increased the effectiveness of distributed energy resources
- Connected devices provide data on unprecedented levels
- Increasingly intelligent systems to utilise this data create meaningful performance improvements and provide a competitive advantage
- The velocity, scope and impact of technological change is unprecedented, suggesting either the acceleration of the 3rd or a 4th industrial revolution

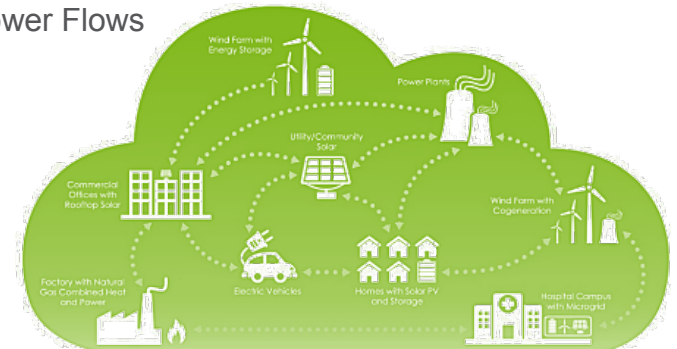
TODAY

Traditional Power Grid
Central, One-Way
Power System



EMERGING

The Energy Cloud
Distributed, Two-Way
Power Flows



WHAT THESE TRENDS MEAN FOR PDI:

1. DISTRIBUTED GENERATION

Trend	Distributed generation
Driver	Behind the meter generation enabled by 1) decreases in the cost of solar PV, and 2) storage and increases in the cost of grid-supplied electricity
Potential Impact on PDI	Reduction in revenue as customers produce more of their electricity or leave the grid entirely
How significant is potential impact	<ul style="list-style-type: none"> - Not significant since Ontario is moving towards fixed distribution rates for residential customers - OEB is currently exploring changes to commercial distribution rate structures - Ontario is drafting new net metering regulations and policy to protect existing electricity infrastructure - Exposure primarily limited to large commercial and industrial

WHAT THESE TRENDS MEAN FOR PDI:

2. SECTOR CONSOLIDATION

Trend	Sector consolidation
Driver	Ontario government is encouraging consolidation directly through tax incentives and indirectly through Hydro One
Potential Impact on PDI	Increasingly stringent regulations put pressure on smaller LDCs and encourage formation of larger LDCs
How significant is potential impact	<ul style="list-style-type: none">- Government has stated that it would not force consolidation, but will encourage it- Regulatory framework that allows LDCs to set distribution rates to earn a target rate of return unchanged. This policy will ensure that, over the medium term, revenues adjust to offset any decrease in sales due to distributed generation

WHAT THESE TRENDS MEAN FOR PDI:

3. SMARTER GRIDS

Trend	Smarter grids
Driver	More efficient and intelligent grid technology improves reliability and enables distributed generation
Potential Impact on PDI	Higher investment requirements for new technologies to keep up with larger peer utilities and require a more sophisticated workforce
How significant is potential impact	<ul style="list-style-type: none">- Ontario Energy Board regulatory framework places high emphasis on ratepayer impacts, so this will limit pressure to deploy expensive technology- Some technologies offset traditional infrastructure investments- Potential risk of not being able to attract appropriately skilled staff



MARKET VALUE

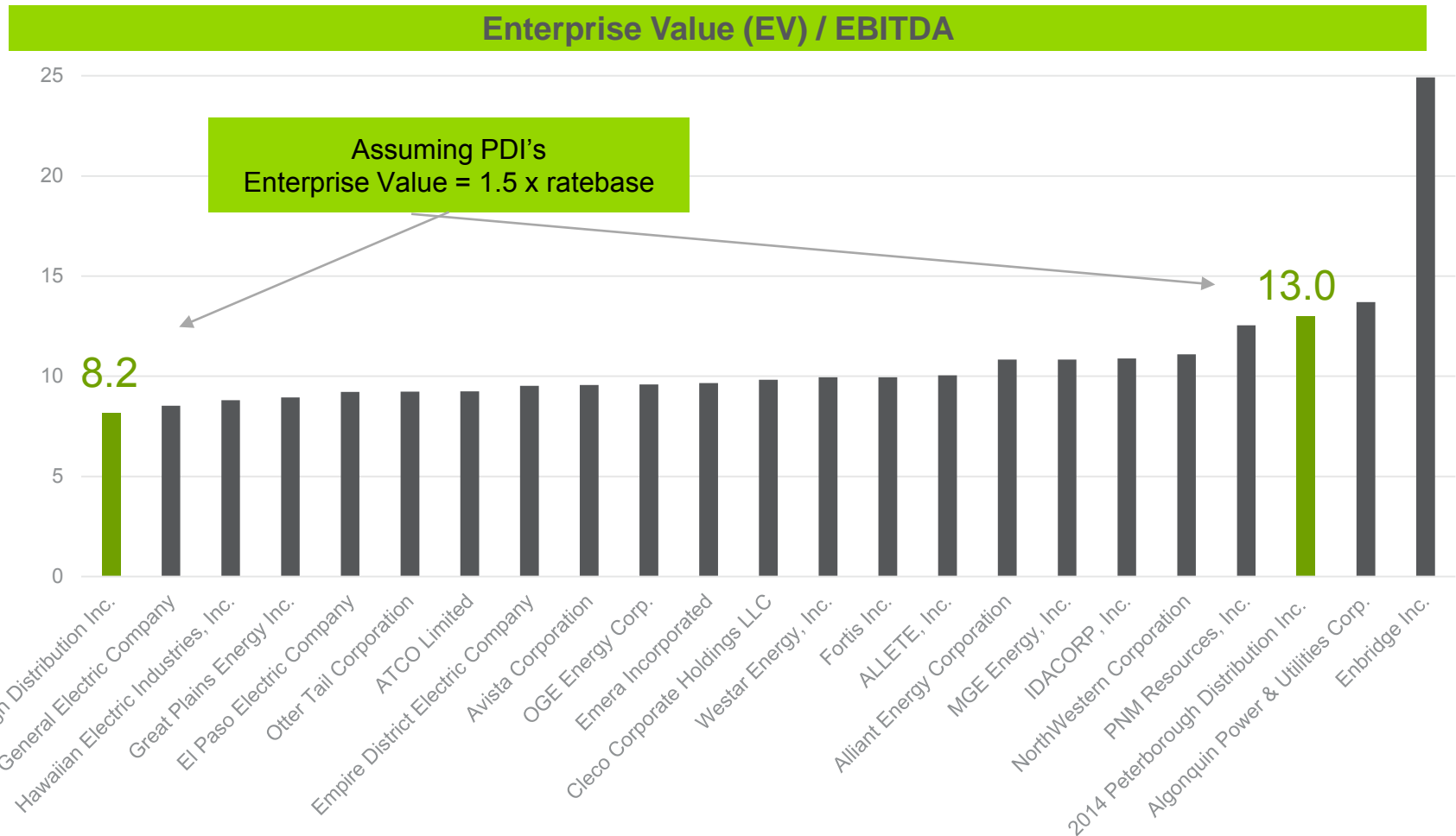
MARKET VALUE

Since 2003, the market valuation for utility companies has increased as long-term interest rates have fallen

S&P Utilities Index Price to Earnings (P/E) Ratio and 30-Year Treasury Yield

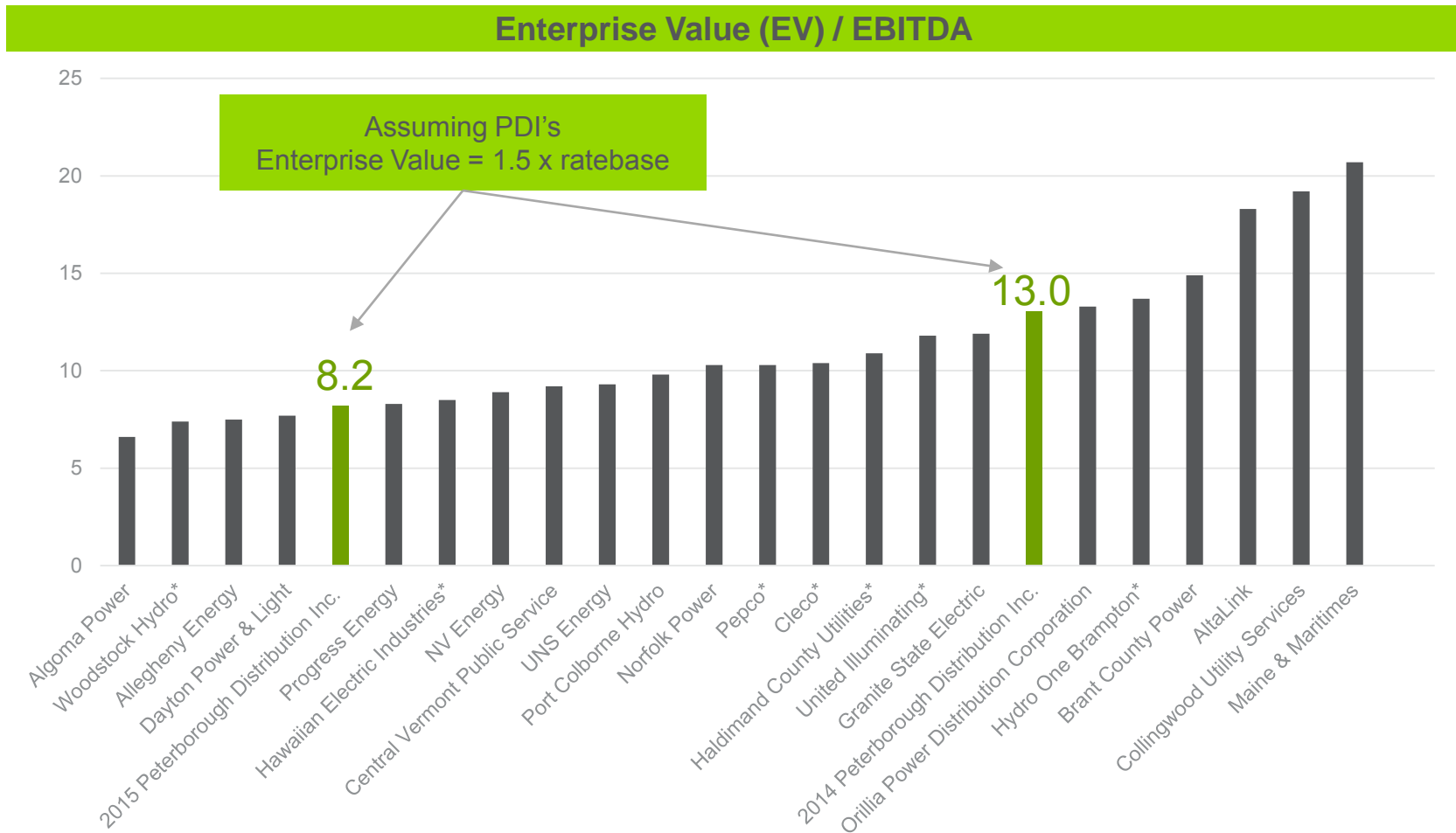


MARKET VALUATION



Source: SNL, Navigant 2015 data

COMPARABLE TRANSACTIONS

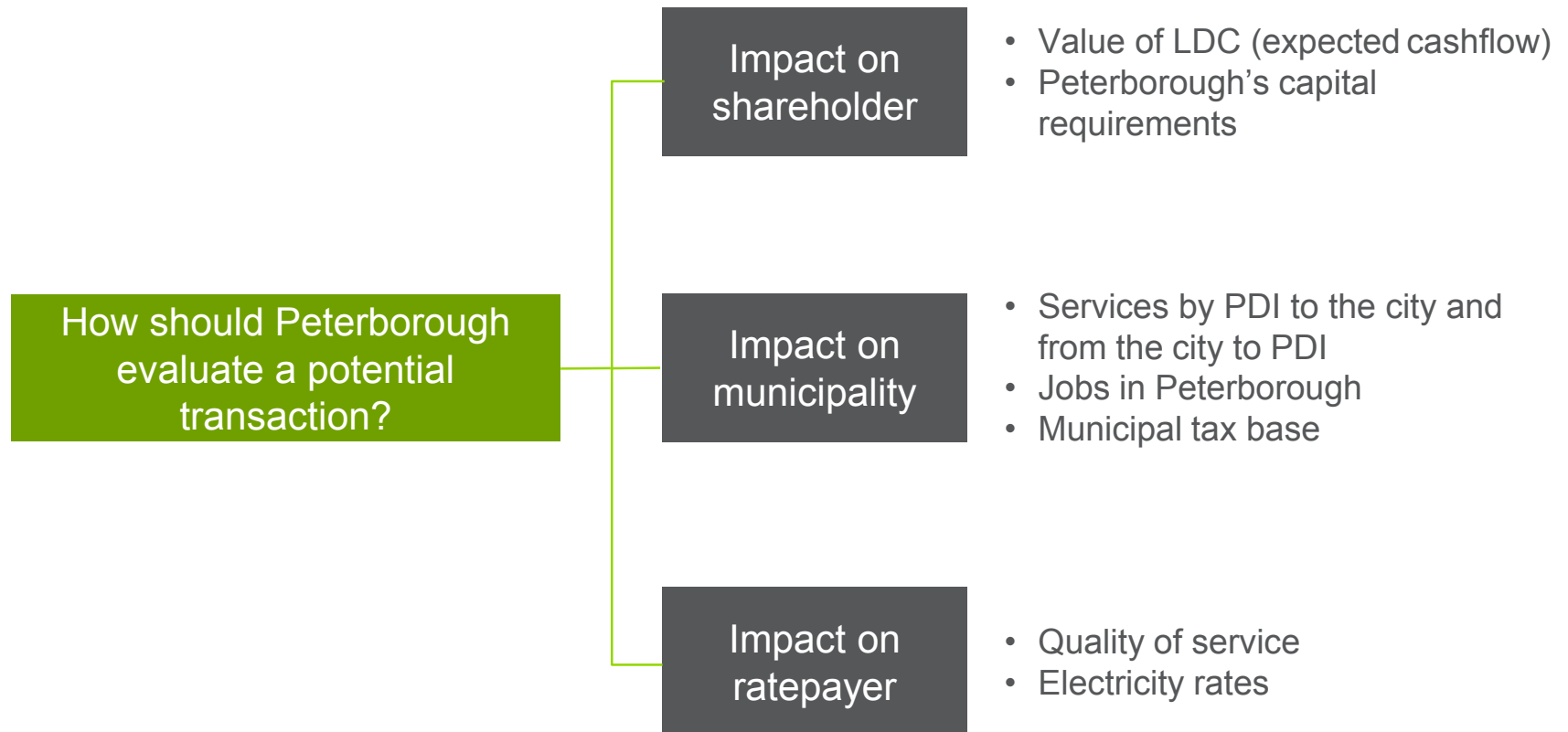


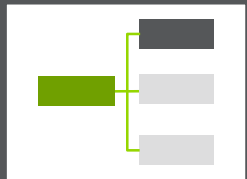
*proposed



PROPOSED DECISION FRAMEWORK

PROPOSED DECISION FRAMEWORK

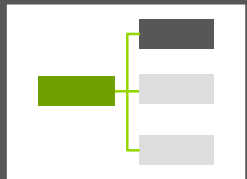




IMPACT ON SHAREHOLDERS



* Dividends and re-invested capital

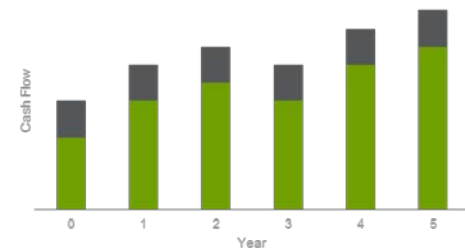


IMPACT ON SHAREHOLDERS

Net proceeds from sale could be higher than hold value if the buyer has a more optimistic view than the seller and the ability to utilize the asset more efficiently

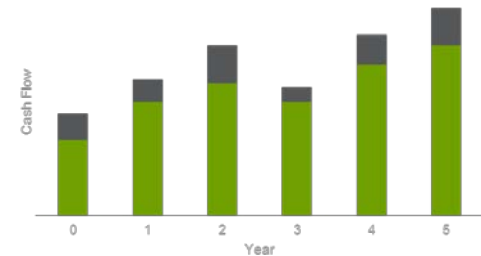
Internal factors

- Merger synergies
- Operating efficiencies
- Capital expenditures



External factors

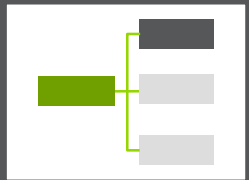
- Forecast impact of
 - regulation
 - technology
- Forecast growth of utility



Cost of Capital

- Lower opportunity cost

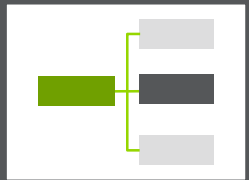




PETERBOROUGH'S CAPITAL REQUIREMENTS

The city should assess its present and future capital requirements

- What are the city's future capital requirements?
- What are the possible sources for these capital requirements
 - Reserves
 - Ongoing distributions from PDI
 - Proceeds from sale of assets, including PDI
- What risks are associated with PDI's future cash flows?
- Can the proceeds of sale be put to better use elsewhere?
 - Example: the government of Ontario expressed the need for cash to invest in infrastructure as the impetus for the partial sale of Hydro One
 - Every shareholder will face different cash needs and different opportunity costs



IMPACT ON MUNICIPALITY

Should consider the potential impact on local jobs and service costs to the city resulting from the sale



Jobs in Peterborough

- How will **local employment** be impacted as a result of the sale?



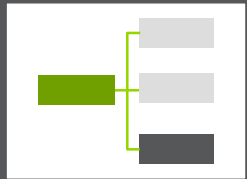
Services

- How will **service costs** be impacted as a result of the sale.
- Consider services by PDI to the city and from the city to PDI
 - What is the plan to transition these services?



Municipal Tax base

- How will **local municipal tax revenues** be impacted as a result of the sale?



IMPACT ON RATEPAYERS

The city should consider the impact of the sale on the ratepayers



How will **service levels** to customers be impacted?

- Customer service and response time
- Billing accuracy
- Frequency and duration of outages



How will **distribution rates** ratepayers be impacted?

- In recent Hydro One purchases, distribution rates for the acquired LDC have been decreased by 1% and then frozen for 5 years
- How will the rates change after any rate freeze period expires?
- Note that distribution rates represent only 20% of typical residential bill; the remaining 80% representing commodity costs, transmission rates, etc. are outside the control of the LDC



OTHER OPTIONS

OTHER OPTIONS TO CONSIDER

As shareholder, the City of Peterborough can choose any of the following strategic ownership alternatives

Sell		Merge	Hold
Private LDC / Utility	Municipally-owned LDCs		
<ul style="list-style-type: none"> • Hydro One is a private entity, hence any sale proceeds would be subject to transfer tax (22%) • Would other potential private purchasers be interested (eg, Fortis)? 	<ul style="list-style-type: none"> • Sale proceeds would be exempt from transfer tax • Would other LDCs be able to achieve same synergies? • Consider impact on ratepayers and municipality (per proposed decision framework) 	<ul style="list-style-type: none"> • Similar risk profile as “Hold” • Would have partial ownership • OEB still regulates rates • Control will depend on equity % and shareholders agreement • Shareholders able to retain synergies for up to 10 years, then synergies flow to ratepayers • May be greater ability to respond to external challenges and pressures 	Status quo



APPENDIX

GLOSSARY

Return on equity (ROE): Is a measure of profitability that calculates how many dollars of profit a company generates with each dollar of shareholders' equity.

It is calculated as follows:

$$\text{Net Income} / \text{Shareholders' Equity}.$$

EBITDA: Earnings before interest, tax, depreciation and amortization (EBITDA) is a measure of a company's operating performance.

It is a way to evaluate a company's performance without having to factor in financing decisions, accounting decisions or tax environments.

APPENDIX : COMPARABLE TRANSACTIONS

Company	Date	EV	EV / EBITDA
Maine & Maritimes	Mar-10	\$109M USD	20.7x
Collingwood Utility Services	Jan-12	\$30M CDN	19.2x
AltaLink	May-14	\$7,000M CDN	18.3x
Brant County Power	May-14	\$40M CDN	14.9x
Hydro One Brampton*	Apr-15	\$607M CDN	13.7x
Granite State Electric	Dec-10	\$285M USD	11.9x
United Illuminating*	Feb-15	\$4,847M USD	11.8x
Haldimand County Utilities*	Jun-14	\$75M CDN	10.9x
Cleco*	Oct-14	\$4,704M USD	10.4x
Norfolk Power	Apr-13	\$93M CDN	10.3x
Pepco*	Apr-14	\$12,605M USD	10.3x
Port Colborne Hydro	Oct-11	\$7M CDN	9.8x
UNS Energy	Dec-13	\$4,343M USD	9.3x
Central Vermont Public Service	Jun-11	\$698M USD	9.2x
NV Energy	May-13	\$10,689M USD	8.9x
Hawaiian Electric Industries*	Dec-14	\$4,567M USD	8.5x
Progress Energy	Jan-11	\$26,627M USD	8.3x
Dayton Power & Light	Apr-11	\$4,798M USD	7.7x
Allegheny Energy	Feb-10	\$9,291M USD	7.5x
Woodstock Hydro*	May-14	\$46M CDN	7.4x
Algoma Power	Jun-09	\$68M CDN	6.6x

CONTACTS

TODD WILLIAMS

Managing Director

647.288.5204

twilliams@navigant.com

BENJAMIN GRUNFELD

Director

416.777.2444

Benjamin.Grunfeld@navigant.com

TRENT WINSTONE

Associate Director

416.985.4912

Trent.Winstone@navigant.com

ARABIND NANDA

Senior Consultant

647.288.5230

Arabind.Nanda@navigant.com