



ONTARIO **POWER**  
GENERATION

# Ontario Power Generation 2018 Year End Investor Briefing





With you today...



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President &  
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# Agenda

- Annual highlights and key developments
- Financial and operational performance
- Project excellence
- Environmental, Social, Governance & Sustainability
- Financing update
- Outlook



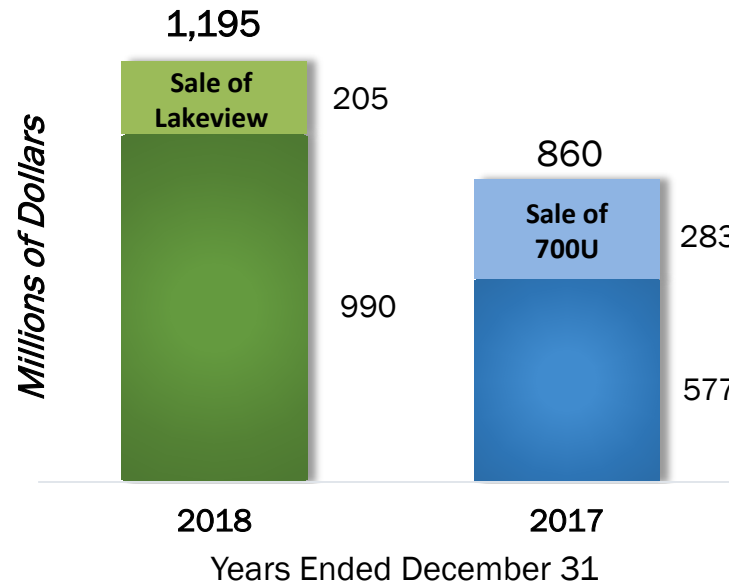
## Annual Highlights

- Net Income Attributable to Shareholder of \$1,195M, reflecting impact of new rates
- Acquisition of Eagle Creek Renewable Energy closed at the end of 2018
- Pickering GS obtained 10-year license renewal; supports extension of commercial operations to 2024, place station in safe state by 2028
- Pickering and Darlington GS receive CNSC's highest safety rating again
- OEB issues decision on application to recover Deferral and Variance Accounts; total approved balance of \$1.3 billion
- After-tax sale of the former Lakeview GS site of \$205 million recognized in 2018
- Darlington Refurbishment Project remains on time, on budget; acknowledgement of business practices working well by Auditor General





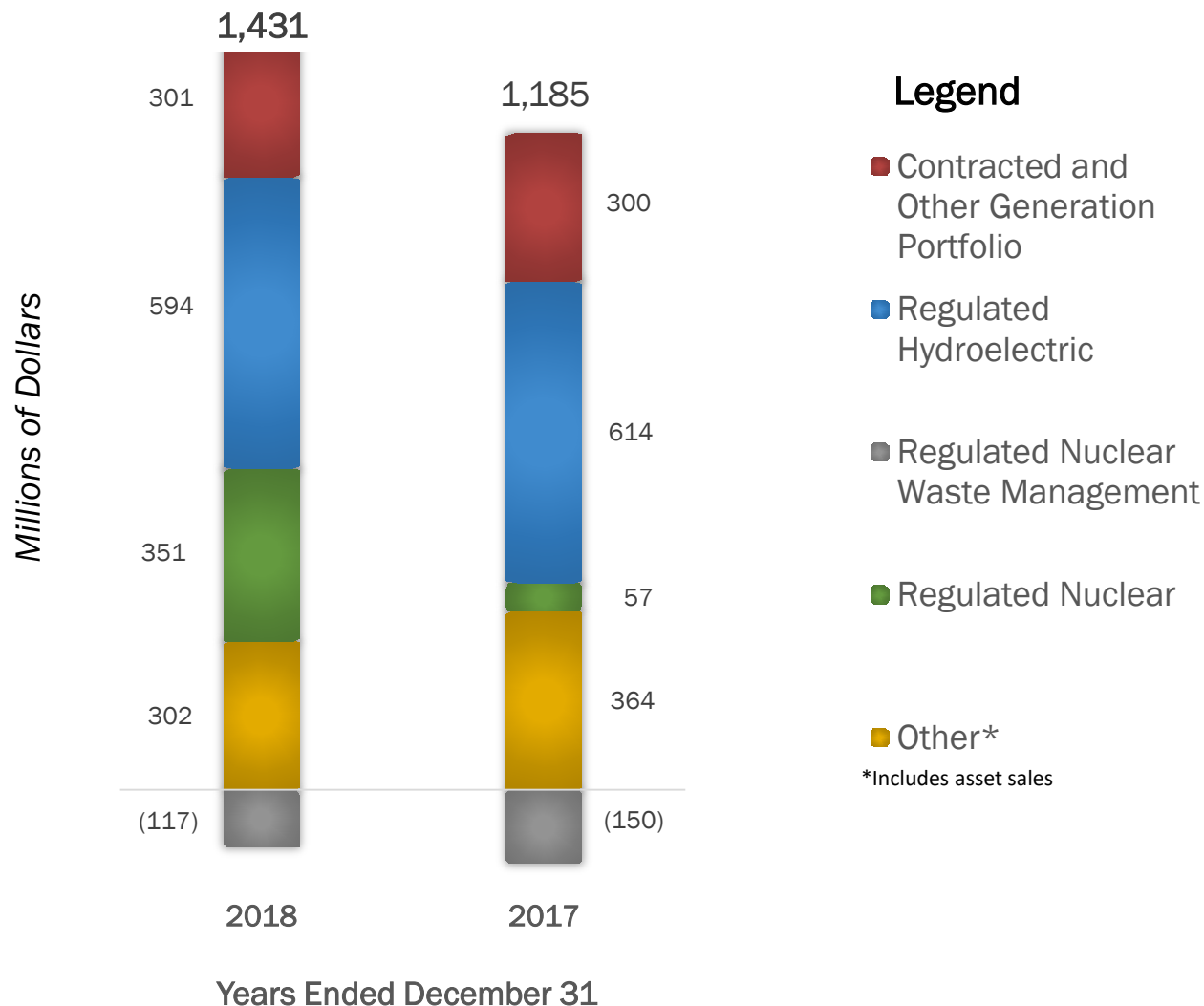
# Net Income Attributable to Shareholder



- Increase in 2018 earnings due to higher revenues of approximately \$359 million reflecting impact of new regulated prices, offset by higher depreciation and amortization expenses of \$56 million, excluding amortization expense related to the recovery of the regulatory account balances, mainly due to depreciation on new assets in service.

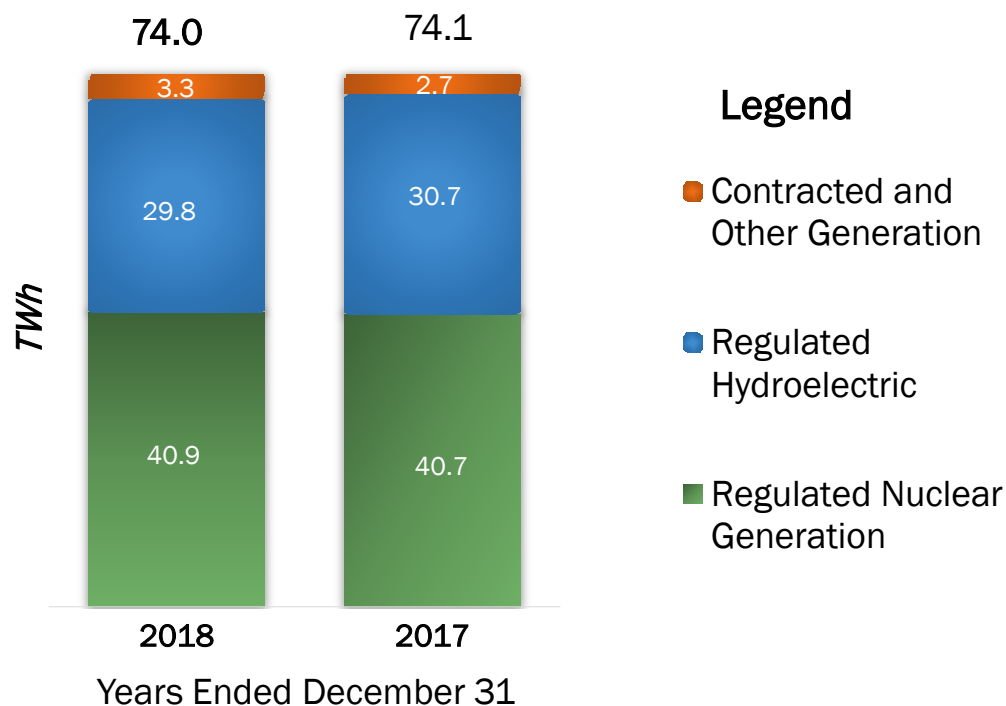


# Segment Earnings Before Interest & Tax





# Electricity Generation



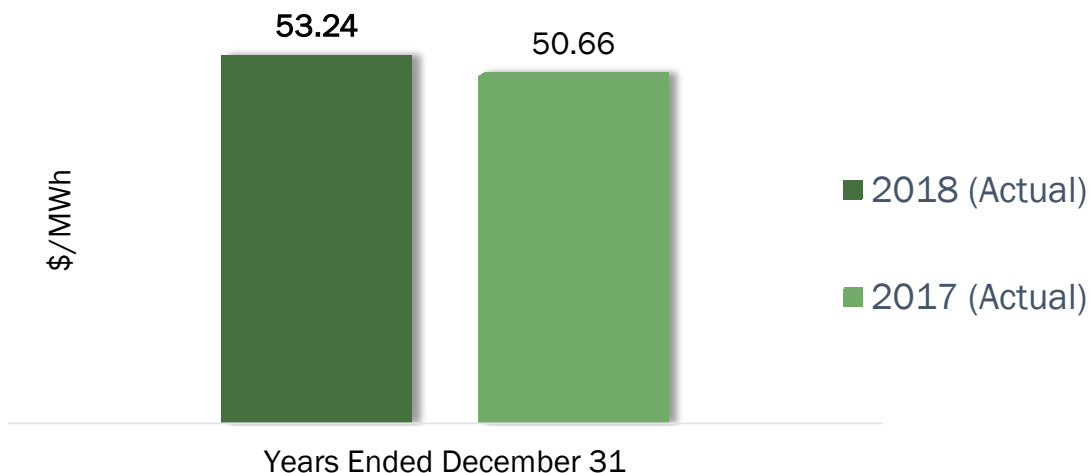
- Increase in generation from Regulated – Nuclear segment primarily due to fewer planned outage days at Darlington, offset by a higher number of outage days at Pickering
- Lower generation from Regulated – Hydroelectric segment primarily due to higher water flows across most river systems in Ontario in 2017
- Higher generation from Contracted and Other Generation primarily due to higher electricity demand in Ontario and partially due to the generation from Eagle Creek facilities





# Enterprise Total Generation Cost (TGC)

*“A measure of how productive our expenditures are in relation to energy generation”*



*Increase in Enterprise TGC per MWh primarily due to lower surplus baseload generation-adjusted (SBG-adjusted) hydroelectric electricity generation as a result of higher water flows in prior year; higher capital expenditures in 2018.*

Enterprise TGC is defined as OM&A expenses, fuel expense and capital expenditures incurred during the period, divided by total electricity generation plus electricity generation forgone due to surplus baseload generation conditions during the period. Excludes costs of the Darlington Refurbishment project, Eagle Creek and other generation development projects and the impact of regulatory variance and deferral accounts.



# Acquisition of Eagle Creek Renewable Energy

- On November 27, 2018, the Company completed the acquisition of Eagle Creek for US\$298 million, prior to working capital and other customary adjustments
- Facilities are located across 13 states, predominantly operating in the New England, Michigan and New York energy markets.
- Eagle Creek also has ownership interests equivalent to approximately 10 MW in thirteen other hydroelectric facilities and two solar facilities in New England.
- With final regulatory approval, Eagle Creek was integrated in OPG's operational portfolio in December 2018
- As at December 31, 2018, Eagle Creek's portfolio had an in-service generating capacity of approximately 226 MW, including the proportionate share of minority shareholdings in certain facilities



# OEB's Decisions on OPG's Application to Recover Deferral and Variance Accounts

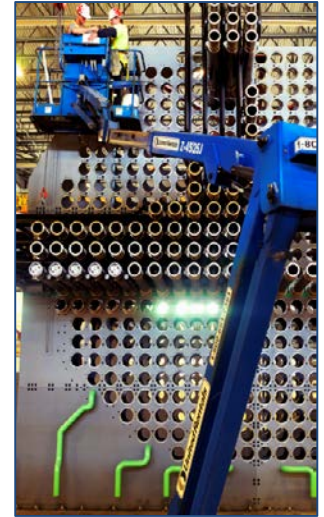
- On August 9, 2018, OPG filed an application with the OEB requesting disposition of balances in regulatory deferral and variance accounts as at December 31, 2017. This included the Pension and OPEB Cash to Accrual Differential Deferral Account that has been accumulating differences since 2014.
- On February 21, 2019, the OEB issued a decision and order that approved a full settlement agreement reached by OPG and intervenors on OPG's requested disposition of regulatory accounts, which resulted in the approval to recover a total of \$1.3 billion recorded in these accounts and associated income tax impacts, without adjustments.
- The OEB's decision and order authorized OPG to collect \$535 million of the approved balances through incremental nuclear and regulated hydroelectric rate riders for the period from January 1, 2019 to December 31, 2021.





# Darlington Refurbishment

- The refurbishment of the first unit, Unit 2, commenced in October 2016 as planned; the unit is scheduled to be returned to service in the first quarter of 2020. The approved budget for the four-unit refurbishment is \$12.8 billion.
- The Unit 2 refurbishment is now in the third major segment, the installation and reassembly of reactor components. Highlights to date include:
  - New fuel channel installation is underway targeting completion in the first half of 2019
  - Continued construction on Heavy Water Storage Facility (HWSF) and Drum Handling Facility, with the HWSF expected to be completed by the second quarter of 2019,
  - Preparation continues for refurbishment of Unit 3, including receipt of long lead materials for the Re-tube and Feeder Replacement and construction on the Full Scale Maintenance Simulator for the turbine generator.
- Overall project continues to track on schedule and budget.
- The Office of the Auditor General of Ontario released its 2018 Annual Report which included a value-for-money audit report on the Darlington Refurbishment project which reaffirmed that OPG had a clear accountability structure to monitor that the project remains on track.

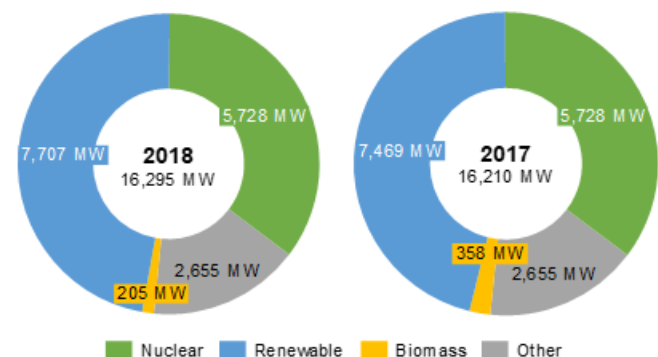




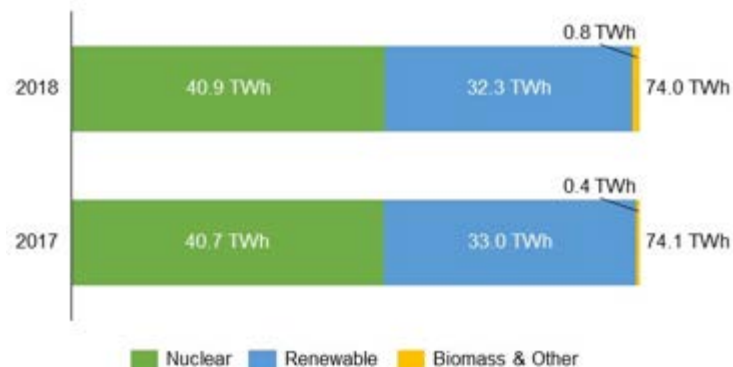
# Climate-Change Metrics

- OPG is in the process of developing longer-term metrics and targets for climate change adaption, and has identified some initial current metrics.

**In-service generating capacity<sup>1</sup> by generation type (MW)** identifies the in-service generating capacity available from OPG's different generation sources and tracks low-carbon energy capacity relative to other sources.



**Electricity generation by generation type (TWh)** identifies electricity generated from OPG's different generation sources and tracks low-carbon energy generation relative to other sources.

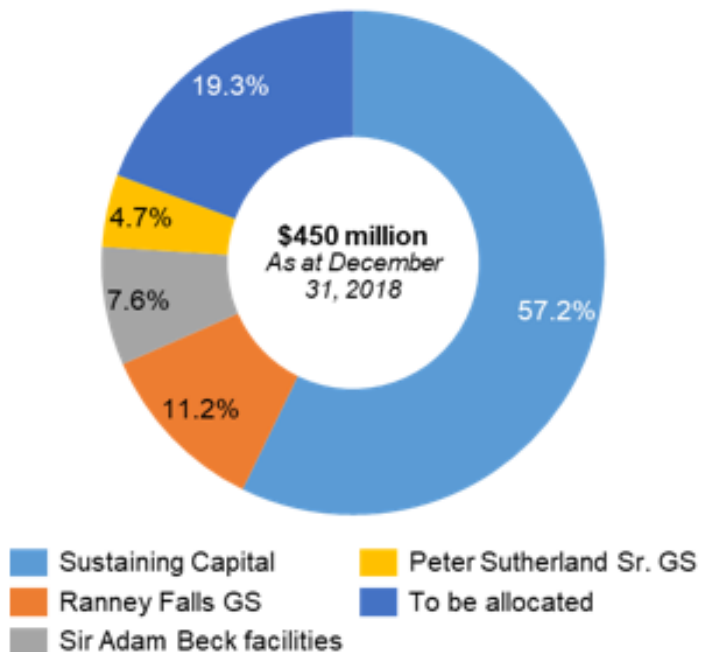


- The in-service generating capacity as at December 31, 2018 and December 31, 2017 includes OPG's share of in-service generating capacity of 275 MW for Portlands Energy Centre (PEC) and 280 MW for Brighton Beach. As at December 31, 2018, the in-service generating capacity also includes Eagle Creek's share of in-service generating capacity of 10 MW from minority-held facilities within Renewable.



# Green Bond Issuances

- Established Green Bond framework allowing for the use of proceeds to finance projects that offer tangible environmental benefits
- In June 2018, OPG became first Canadian utility to issue green bonds, closing a \$450 million 30-year bond
- Net proceeds from the issuance used for investment in eligible hydroelectric projects, including new generating facilities
- In January 2019, issued second 30-year green bond, raising \$500 million
- Net proceeds from January 2019 issuance largely used to finance acquisition of Eagle Creek

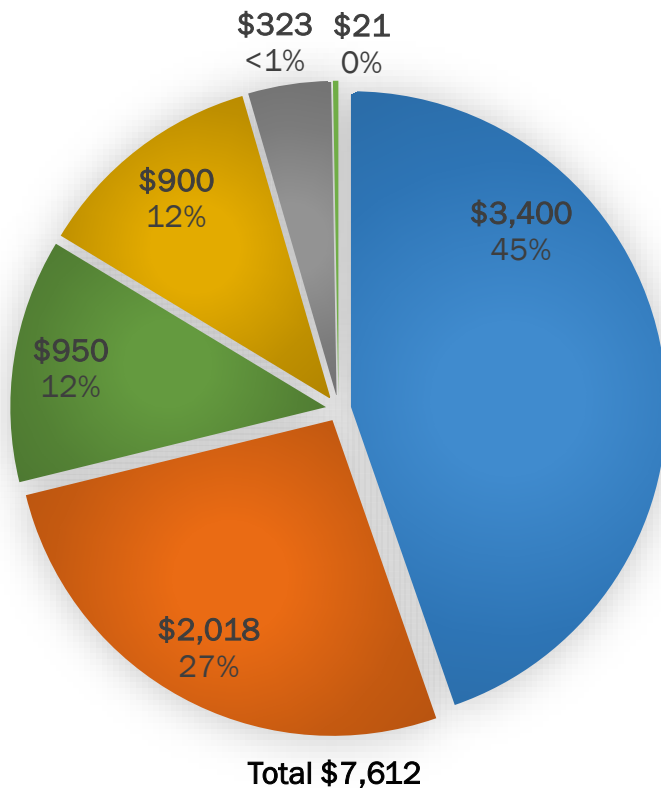






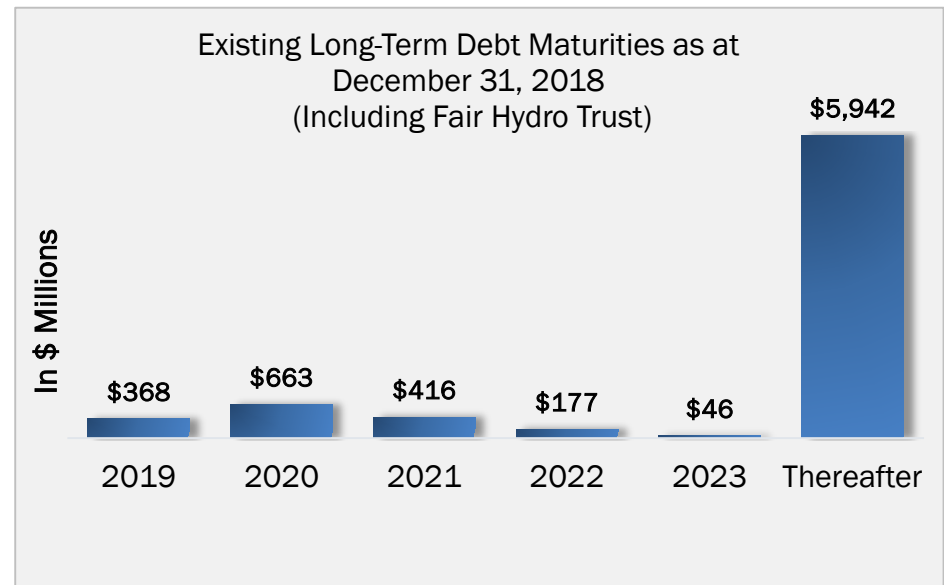
# Long-Term Debt Profile

Long-Term Debt (\$M)  
December 31, 2018



## Legend

- OEFC
- Medium Term Notes
- Eagle Creek
- Project Financing
- Fair Hydro Trust
- Other





# Outlook

- **Regulated – Nuclear**
  - Pickering GS to continue to perform well against expectations and execute planned maintenance effectively and efficiently; continued excellent execution of planned outages within budgeted time and cost
  - Continue to execute Darlington GS Unit 2 refurbishment safely, on schedule and on budget
  - Continued delivery of sustained segment earnings with regulatory price certainty
- **Regulated – Hydroelectric and Contracted Generation**
  - Continue to generate a stable level of earnings and cash flow
  - Unit availability to remain high, particularly during times of high commercial value
  - Contracted and Other Generation segment to continue to contribute a stable level of earnings and cash flow from operating activities in 2019, including full year of Eagle Creek
- **Other**
  - Continued collaboration and engagement with labour relations; mediator-arbitrator expected to announce decision on collective agreement with Power Workers' Union by end of first quarter
  - Change in senior leadership with new President and CEO and President of Nuclear
  - Cash flow from operating activities should continue to improve as collection continues from new regulated prices and recovery of deferral and variance accounts
  - Nuclear Segregated Funds to continue to be fully funded – return capped to match growth in liability
  - Continue investment in asset operating performance, including IT infrastructure upgrades and sustaining capital expenditures across the fleet
  - Continue to assess opportunities for growth within the industry, including the evolution of the industry and potential for further expansion