

## QUARTERLY INVESTMENT REPORT

### September 30, 2018

### Assets Under Management

as at September 30, 2018	\$ 44,591 million
as at June 30, 2018	\$ 44,303 million

### Asset Mix

	Policy Asset Mix	September 30, 2018		June 30, 2018	
		(CAD millions)	(%)	(CAD millions)	(%)
Fixed Income	30.5%	15,057	33.8	15,496	35.3
Inflation Sensitive & Alternatives	30.0%	10,060	22.6	9,408	21.0
Canadian Equity	8.0%	3,562	8.0	3,591	7.8
Global Developed Equity	15.0%	9,784	21.9	9,798	22.0
Emerging Markets Equity	5.5%	2,392	5.4	2,305	5.6
Global Small Cap Equity	5.0%	2,263	5.1	2,253	5.0
Private Equity	6.0%	1,209	2.7	1,195	2.7
Overlays	0.0%	264	0.6	259	0.6
	100%	44,591	100.0	44,303	100.0

### Performance Summary

	Q3 2018	Year to Date	1 Year	4 Year
LAPP	0.21%	2.85%	7.77%	7.15%
Policy Benchmark	0.22%	3.27%	7.53%	7.08%
Excess Returns	(0.01%)	(0.43%)	0.24%	0.07%

Note: Performance net of fees

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**Investment Performance by Calendar Years**

Asset Category	Asset/Sub-Asset Category Benchmark	2018		Calendar Years		
		QTD	YTD	2017	2016	2015
Total	Fund	0.2	2.8	10.1	5.8	7.9
	Policy	0.2	3.3	9.0	6.0	6.7
Fixed Income	Asset Category Total	(1.3)	(0.2)	5.0	2.6	4.3
	Asset Category Benchmark	(1.6)	(1.0)	4.3	1.5	4.1
	Short Term and Cash	0.4	1.2	1.0	0.9	0.9
	FTSE TMX Canada 91 day T Bill Index	0.3	0.9	0.6	0.5	0.6
	Universe Bonds	(0.6)	0.4	3.3	3.3	4.1
	FTSE TMX Canada Universe Bond Index	(1.0)	(0.4)	2.5	1.7	3.5
	Long Bonds	(2.3)	(1.1)	7.6	2.4	4.1
	FTSE TMX Canada L.T. Govt. Bond Index	(2.6)	(1.8)	6.5	1.3	4.5
	Private Debt & Loan	0.5	2.9	2.3	4.4	6.1
	FTSE TMX Canada Universe Bond Index	(1.0)	(0.4)	2.5	1.7	3.5
	Private Mortgages	(0.4)	1.4	2.5	1.9	5.1
FTSE TMX Canada Universe Bond Index	(1.0)	(0.4)	2.5	1.7	3.5	
Inflation Sensitive & Alternatives	Asset Category Total	0.8	3.6	8.1	5.2	8.3
	Asset Category Benchmark	1.0	5.4	5.7	5.2	6.7
	Real Estate	0.7	4.5	9.1	4.3	8.7
	Real Estate Index <sup>ii</sup>	0.7	6.0	7.0	5.8	8.0
	Canadian Real Estate	1.4	3.7	8.5	5.4	5.1
	Canadian Real Estate Index <sup>iii</sup>	1.4	5.0	7.0	5.8	8.0
	Foreign Real Estate	(1.0)	6.3	10.9	1.5	19.0
	Foreign Real Estate Index <sup>iv</sup>	(1.0)	8.4	7.0	5.8	8.0
	Private Infrastructure	0.1	1.2	7.9	7.8	13.9
	Private Infrastructure Index <sup>v</sup>	1.4	4.6	6.0	5.7	5.8
Renewable Resources	4.9	9.2	15.7	10.0	4.2	
Renewable Resources Index <sup>vi</sup>	1.4	4.6	6.0	5.7	10.0	
Short Horizon	Asset Category Total	0.8	4.2	15.9	9.3	11.2
	Asset Category Benchmark	1.3	5.4	14.7	9.6	8.2
	Canadian Equity	(1.0)	0.4	10.5	20.3	(7.4)
	S&P/TSX Capped Composite Index	(0.6)	1.4	9.1	21.1	(8.3)
	Global Developed Equity	2.5	7.7	16.2	4.8	21.8
	MSCI World Index	3.2	8.8	14.4	3.8	18.9
	Emerging Markets	(3.3)	(5.7)	30.4	8.7	6.2
	MSCI Emerging Markets Index	(2.8)	(4.8)	28.3	7.3	2.0
Small Cap Equity	0.5	5.9	14.1	12.1	13.6	
Small Cap Equity Index <sup>vii</sup>	0.2	8.0	15.0	18.5	7.7	
Long Horizon	Private Equity	5.8	12.2	0.7	(2.2)	(9.3)
	CPI 1 month lagged + 650 bps (5-yr rolling average) <sup>viii</sup>	1.9	6.1	8.0	7.7	4.8
Overlays	Overlays	2.6	6.1	8.3	1.8	52.2

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### Investment Performance by Annualized Years

Asset Category	Asset/Sub-Asset Category Benchmark	2018	Annualized Years			
		YTD	1	2	3	4
Total	Fund	2.8	7.8	6.6	7.8	7.1
	Policy	3.3	7.5	5.9	7.4	7.1
Fixed Income	Asset Category Total	(0.2)	3.2	(0.9)	3.0	4.0
	Asset Category Benchmark	(1.0)	2.5	(1.7)	2.1	3.4
	Short Term and Cash	1.2	1.5	1.2	1.1	1.1
	FTSE TMX Canada 91 day T Bill Index	0.9	1.2	0.8	0.7	0.7
	Universe Bonds	0.4	2.3	0.2	2.6	3.4
	FTSE TMX Canada Universe Bond Index	(0.4)	1.7	(0.7)	1.6	2.5
	Long Bonds	(1.1)	4.2	(1.0)	3.6	4.6
	FTSE TMX Canada L.T. Govt. Bond Index	(1.8)	3.4	(2.0)	2.6	4.0
	Private Debt & Loan	2.9	2.9	2.8	3.7	4.5
	FTSE TMX Canada Universe Bond Index	(0.4)	1.7	(0.7)	1.6	2.5
	Private Mortgages	1.4	2.7	0.3	2.2	3.4
	FTSE TMX Canada Universe Bond Index	(0.4)	1.7	(0.7)	1.6	2.5
Inflation Sensitive & Alternatives	Asset Category Total	3.6	9.2	6.6	7.7	7.2
	Asset Category Benchmark	5.4	7.8	5.9	6.3	6.5
	Real Estate	4.5	10.1	7.9	7.9	7.9
	Real Estate Index <sup>i</sup>	6.0	8.7	7.7	7.6	7.5
	Canadian Real Estate	3.7	9.5	7.7	7.1	6.5
	Canadian Real Estate Index <sup>ii</sup>	5.0	7.7	7.2	7.3	7.3
	Foreign Real Estate	6.3	11.8	8.6	9.8	12.0
	Foreign Real Estate Index <sup>iii</sup>	8.4	11.2	9.0	8.4	8.1
	Private Infrastructure	1.2	6.5	6.2	9.8	8.2
	Private Infrastructure Index <sup>iv</sup>	4.6	6.2	6.1	6.0	6.6
Renewable Resources	9.2	16.4	16.3	12.3	10.1	
Renewable Resources Index <sup>v</sup>	4.6	6.2	6.1	6.0	7.3	
Short Horizon	Asset Category Total	4.2	10.3	12.2	11.9	10.3
	Asset Category Benchmark	5.4	11.4	11.9	11.8	10.0
	Canadian Equity	0.4	5.3	7.6	9.7	5.1
	S&P/TSX Capped Composite Index	1.4	5.9	7.5	9.7	4.9
	Global Developed Equity	7.7	13.9	14.7	13.0	12.9
	MSCI World Index	8.8	15.0	13.7	12.2	12.6
	Emerging Markets	(5.7)	1.9	9.7	11.9	9.5
	MSCI Emerging Markets Index	(4.8)	2.5	9.3	11.0	7.3
	Small Cap Equity	5.9	12.1	13.1	13.4	11.8
Small Cap Equity Index <sup>vi</sup>	8.0	13.9	13.9	15.9	12.6	
Long Horizon	Private Equity	12.2	12.1	6.8	2.2	(1.6)
	Private Equity Index <sup>vii</sup>	6.1	8.2	8.1	9.6	7.8
Overlays	Overlays	6.1	13.8	17.7	10.3	11.3

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- <sup>i</sup> Real Estate Index: A blend of the IPD Large Institutional Index & MSCI Global Region Property Index, one quarter lag. Due to the time lag in receiving Real Estate Index data, the pool is benchmarked against the Canadian & Foreign Real Estate portfolio returns for the period between July 1, 2018 and September 30, 2018.
  - <sup>ii</sup> Canadian Real Estate Index: IPD Large Institutional Index: one quarter lag. Due to the time lag in receiving IPD Large Institutional All Property Index data, the pool is benchmarked against the Canadian Real Estate portfolio returns for the period between July 1, 2018 and September 30, 2018.
  - <sup>iii</sup> Foreign Real Estate Index: MSCI Global Region Property Index, one quarter lag. Due to the time lag in receiving MSCI Global Region Property Index data, the pool is benchmarked against the Foreign Real Estate portfolio returns for the period between July 1, 2018 and September 30, 2018.
  - <sup>iv</sup> Private Infrastructure Index: CPI + 450 bps (5-year rolling average), effective August 1, 2015. Prior to this time, the benchmark was S&P Global Infrastructure (Hedged C\$) +1%.
  - <sup>v</sup> Renewable Resources Index: CPI + 450 bps (5-year rolling average), effective August 1, 2015. Prior to this time, the benchmark was 50% FTSE TMX Canada Real Return Bond / 50% MSCI World Index (Hedged C\$) + 1.5%.
  - <sup>vi</sup> Small Cap Equity Index: 1/3 S&P/TSX Small Cap Index + 2/3 MSCI Small Cap Index.
  - <sup>vii</sup> Private Equity Index: CPI + 650 bps (5-year rolling average), effective January 1, 2016. Prior to this time, the benchmark was MSCI World (Hedged C\$) + 3%