

## **Cost of capital determination for disclosure year 2019**

**First Gas and Powerco gas pipeline businesses**

**[2018] NZCC 16**

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## Associated documents

Publication date	Reference	Title
28 February 2017	ISSN 1178-2560	Gas Transmission Services Input Methodologies Determination 2012 (Consolidated February 2017)
20 December 2016	ISBN 978-1-869455-48-4	Input methodologies review decisions (Topic paper 4: Cost of capital issues)
24 May 2017	ISSN 1178-2560	Revised cost of capital determination for gas distribution and gas transmission businesses' default price-quality paths
12 October 2017	ISSN 1178-2560	Cost of capital determination for information disclosure – First Gas and Powerco gas pipeline businesses disclosure year 2018
3 April 2018	ISSN 1178-2560	Gas Distribution Services Input Methodologies Determination 2012 (Consolidated April 2018)
30 April 2018	ISSN 1178-2560	Guidelines for WACC determinations under the cost of capital input methodologies – Regulation under Part 4 of the Commerce Act 1986
30 April 2018	ISSN 1178-2560	Cost of capital determination for disclosure year 2019 – Electricity distribution businesses and Wellington International Airport
31 July 2018	ISSN 1178-2560	Cost of capital determination for disclosure year 2019 – For Transpower, gas pipeline businesses and suppliers of specified airport services (with a June year-end)

## WACC estimates for gas disclosure year 2019 (Powerco and First Gas)

1. This determination specifies weighted average cost of capital (WACC) estimates for information disclosure for disclosure year 2019 for gas distribution businesses (Powerco Limited and First Gas Limited) and gas transmission businesses (First Gas Limited) as required by our input methodologies.<sup>1</sup>
2. Vanilla and post-tax WACC estimates are summarised in Table 1 below.

**Table 1: Vanilla and post-tax WACC estimates (%)**

	Mid-point	25 <sup>th</sup> percentile	67 <sup>th</sup> percentile	75 <sup>th</sup> percentile
Vanilla WACC	5.34	4.64	5.80	6.05
Post-tax WACC	4.88	4.17	5.34	5.58

3. This determination should be read with our guidelines for WACC determinations under the cost of capital input methodologies which we have applied when making this determination.<sup>2</sup> The guidelines explain our methodology for calculating WACC estimates, including:<sup>3</sup>
  - 3.1 the formulas used which are set out in the input methodologies;
  - 3.2 the values for WACC parameters which are fixed under the input methodologies; and
  - 3.3 our methodology for determining the risk-free rate and average debt premium which is explained in the input methodologies.

<sup>1</sup> Disclosure year 2019 for these businesses begins on 1 October 2018 and ends on 30 September 2019. For further details see: Commerce Commission “Fast track amendments to information disclosure determinations for First Gas gas pipeline services: Companion paper” (14 June 2017) and “[FAST TRACK] Gas Distribution Information Disclosure Amendments Determination (No.1) 2017”, available at <http://www.comcom.govt.nz/regulated-industries/electricity/information-disclosure-requirements-for-distributors/amendments-to-information-disclosure-requirements-2017/>.

<sup>2</sup> Commerce Commission “Guidelines for WACC determinations under cost of capital input methodologies – Regulation under Part 4 of the Commerce Act 1986” (30 April 2018) available at [https://comcom.govt.nz/\\_data/assets/pdf\\_file/0021/91191/Guidelines-for-WACC-determinations-under-the-cost-of-capital-input-methodologies-30-April-2018.pdf](https://comcom.govt.nz/_data/assets/pdf_file/0021/91191/Guidelines-for-WACC-determinations-under-the-cost-of-capital-input-methodologies-30-April-2018.pdf).

<sup>3</sup> Table 1 of the guidelines contains the links to the relevant input methodologies.

## Further details regarding the WACC estimates

### WACC parameter values

4. The parameter values used to generate the mid-point WACC estimates are set out in Table 2 below.

**Table 1: Values used to calculate WACC estimates**

<b>Parameter</b>	<b>Estimate</b>
Risk-free rate	2.10%
Average debt premium (BBB+)	1.66%
Leverage	42%
Asset beta	0.40
Equity beta	0.69
Tax-adjusted market risk premium	7.0%
Average corporate tax rate	28.0%
Average investor tax rate	28.0%
Debt issuance costs	0.20%
Cost of debt	3.96%
Cost of equity	6.34%
Standard error of WACC	0.0105
<b>Mid-point vanilla WACC</b>	<b>5.34%</b>
<b>Mid-point post-tax WACC</b>	<b>4.88%</b>

### Risk-free rate

5. The risk-free rate reflects the linearly-interpolated, annualised, bid yield to maturity on New Zealand Government bonds with a term to maturity of five years. Our estimate of the risk-free rate is based on data reported by Bloomberg for the three month period ending September 2018 in respect of the April 2023 and April 2025 maturity bonds.
6. The daily data reported by Bloomberg is linearly interpolated, annualised (to reflect the six monthly payment of interest), and averaged to produce the estimate of a 2.10% interest rate on a New Zealand Government bond with a five year term to maturity as at 1 October 2018.

### Average debt premium

7. The average debt premium of 1.66% is the average of the debt premium values for the current debt premium reference year (DPRY) and the four previous DPRYs, as shown in Table 2 below.<sup>4</sup> DPRY 2019 is the current reference year for gas distribution businesses and gas transmission businesses, together referred to as gas pipeline businesses (GPBs).<sup>5</sup>

**Table 2: Average debt premium for GPBs (%)**

	DPRY 2015	DPRY 2016	DPRY 2017	DPRY 2018	DPRY 2019	Average
Debt premium	1.84	1.66	1.54	1.65	1.60	1.66

### Changes in the risk-free rate and debt premium over time

8. Changes in the risk-free rate and debt premium on relevant bonds are illustrated below. Figure 1 shows, as at 1 October 2018, changes over time in the:
- 8.1 five year risk-free rate; and
  - 8.2 debt premium on bonds rated BBB+ with a term of five years.

<sup>4</sup> The values for 2014 to 2017 are set out in clause 2.4.4(4) of the GDS and GTS IM Determinations: 2014=2.34%, 2015=1.84%, 2016=1.66%, 2017=1.54%. The value for DPRY 2018 (1.65%) was determined in May 2017: *Revised cost of capital determination for gas distribution and gas transmission businesses' default price-quality paths* [2017] NZCC 13 (24 May 2017). The value for DPRY 2019 (1.60%) was determined in July 2018: *Cost of capital determination for disclosure year 2019 – For Transpower, gas pipeline businesses and suppliers of specified airport services (with a June year-end)* [2018] NZCC 11 (31 July 2018).

<sup>5</sup> The 'current debt premium reference year' refers to the debt premium reference year that contains the start of the relevant disclosure year. The GPBs' debt premium reference year 2019 starts on 1 March 2018.

**Figure 1: Changes in the five year risk-free rate and debt premium over time**

