



TransGrid

Timing of revenue recovery for large projects

September 2020

Disclaimer

The modelling provided in this presentation is provided for illustrative purposes to demonstrate the impacts of the timing of revenue recovery on the financeability of large projects. Any assumptions and projections are on a theoretical basis only and therefore should not be relied upon or used for any other purposes. TransGrid makes no representations or warranties express or implied as to the content in the presentation.

Introduction

This presentation sets out the outcomes of ongoing work on the financeability of Major Projects

- TransGrid supports the existing economic regulatory framework for business-as-usual expenditure
- We have identified an unintended consequence arising from the application of the regulatory framework to Major ISP Projects relating to the timing of revenue recovery, and the impacts this has on project financeability. This issue arises due to the unprecedented size and scale of the Major ISP Projects
- TransGrid has developed the analysis in this presentation to highlight this financeability problem and to illustrate the impacts of possible changes to the revenue recovery profile for these projects that may address the problem. These materials have been discussed with AER staff and their feedback has been incorporated.
- The analysis is presented on a simplified and illustrative basis, based on the AER's 2018 Rate of Return Instrument and model firm structure in order to illustrate the problem and impacts of the scenarios on an objective basis
- This presentation is structured as follows:
 - Section 1: Key assumptions for the analysis
 - Section 2: Outputs of a range of scenarios showing the base case and the impacts of possible changes to the revenue recovery profile
- The analysis is focused on whether the project is financeable on a model firm basis in each scenario. We define 'financeable' as being able to support the financial metrics required by credit rating agencies for a BBB+ rated benchmark entity, geared at 60% as per the model firm definition
- The scenarios presented examine both a Major ISP Project on a stand-alone basis, and overlaid onto an existing TNSP Regulated Asset Base (RAB). The analysis assumes a single indicative \$2 billion project to illustrate the effects. The layering of multiple projects of a similar size can be expected to have a compounding effect

Section 1

Key assumptions

Major Project (hypothetical)

Key assumptions

We have adopted the following assumptions

1. Total capex of \$2 billion, evenly spent over a five year construction period;
2. Rate of Return Instrument parameters are applied for: Cost of equity (6.36%); Leverage (60%); Inflation (2.45%) and Imputation Credits (58.5%);
3. Tax depreciation applies diminishing value to new capex;
4. Cost of Debt is based on a 10-year trailing average, using the assumed base rate from Bloomberg;

The analysis is indicative and the following assumptions are made for simplicity reasons:

5. Exclude elements such as:
 - a) Debt and equity raising cost;
 - b) Revenue smoothing and other revenue adjustments;
 - c) Operating expenditure;
6. Assume no mismatch between forecast and actual inflation;
7. Building block revenues have been used rather than smoothed revenue;
8. Debt drawdown and repayment have been calculated based on a target gearing debt level as consistent with the PTRM model published by the AER.

Rate of return for scenario comparisons

Model firm characteristics have been applied to determine a “baseline” cost of equity

Parameter	Source	Value
Cost of Equity ¹	2018 AER Rate of Return Instrument (RORI)	6.36%
Gearing	2018 RORI	60%
Inflation	2018 RORI	2.45%
Imputation Credits	2018 RORI	0.585
Cost of Debt	2018 RORI, Bloomberg	Variable (10 year trailing average) at target credit rating
Target Credit Rating ²	2018 RORI	BBB+ / Baa1
FFO / Net Debt ³ downgrade threshold	Moody's	9.0%



Target comparison rate for project equity returns

1. Indicative return on equity sourced from the 2018 Rate of Return Instrument (RORI), based on a 6.1% market risk premium, 0.6 equity beta, and 2.7% risk free rate

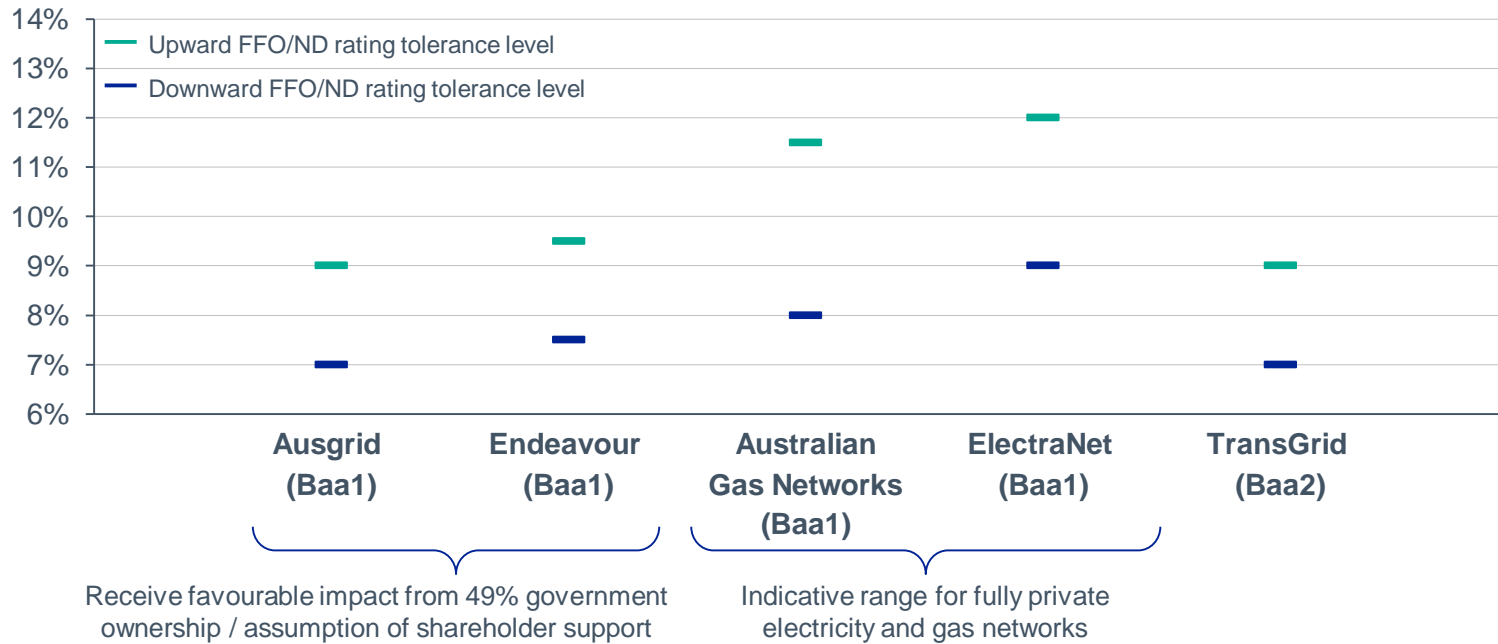
2. The BBB+ (from S&P) target credit rating in the RORI is equivalent to a Baa1 credit rating from Moody's

3. Funds from Operations (FFO) over Net Debt is a key credit metric applied by external ratings agencies. See next slide for basis for downgrade thresholds based on Moody's published ratings

BBB+/Baa1 credit rating is a key input to the analysis

Moody's has set a minimum 9% FFO/ND for Baa1 (absent government ownership)

- Credit rating agencies apply a rating methodology to assess credit metrics based on a grid of factors developed for each industry
- To regulated electricity networks these factors include:
 - Regulatory Environment and Asset Ownership Model
 - Scale and Complexity of Capital Program
 - Financial Policy
 - Leverage and Coverage (financial metrics)
- A key financial metric is Funds from Operations (FFO) over Net Debt, which measures the ability of the business to generate cashflows sufficient to reliably service its debt
- There are four electricity networks rated BBB+ / Baa1 in Australia, with the following FFO/Net Debt tolerances:



- Moody's has consistently confirmed a 9% upward rating tolerance for TransGrid in order for it to move to a Baa1 rating
- This is consistent with the 9% downward rating for ElectraNet to move to Baa2 rating (TransGrid's current level)
- As a result we have adopted 9% as the rating floor for BBB+ / Baa1 rated networks (absent government ownership)

Source: Moody's Credit Opinions for NSWEN (TransGrid), Ausgrid, AGN, ElectraNet

Section 2

Scenarios

Outline of the scenarios

- This section provides analysis on the timing of revenue recovery associated with a Major Project (i.e. \$2 billion), having regard for:
 - the whole of business impact (i.e. including the existing RAB)
 - adopting depreciation on an as-incurred rather than as-commissioned basis for the Major Project
 - adopting the removal of RAB indexation for the Major Project
 - adopting reduced asset lives for all asset classes (i.e 50% reduction to asset lives) for the Major Project
 - adopting an accelerated depreciation methodology (i.e. Double diminishing Value) for the Major Project

		Revenue Scenarios				
		2018 RORI	2018 RORI + Depreciation 'as incurred'	2018 RORI + Removal of RAB Indexation	2018 RORI + Reduced Asset Life	2018 RORI + Accelerated Depreciation
Asset Scenarios	Major Project	Scenario ①	Scenario ②	Scenario ③	Scenario ④	Scenario ⑤
	Existing RAB	Scenario ⑥				
	Existing RAB plus Major Project	Scenario ⑦	Scenario ⑧	Scenario ⑨	Scenario ⑩	Scenario ⑪

Summary

No scenario can be geared at model firm 60% while supporting BBB+ credit metrics

		Revenue Scenarios				
		2018 RORI	2018 RORI + Depreciation 'as incurred'	2018 RORI + Removal of RAB Indexation	2018 RORI + Reduced Asset Life	2018 RORI + Accelerated Depreciation
Asset Scenarios	Major Project	① 33.8% gearing	② 33.1% gearing	③ 49.4% gearing	④ 20.9% gearing	⑤ 20.2% gearing
	Existing RAB	⑥ 48.8% gearing				
	Existing RAB plus Major Project	⑦ 46.0% gearing	⑧ 46.1% gearing	⑨ 49.4% gearing	⑩ 49.8% gearing	⑪ 47.0% gearing

1 Major Project

Results in a sub-investment grade FFO/ND at 60% gearing; c.34% gearing required

Output: Project Returns

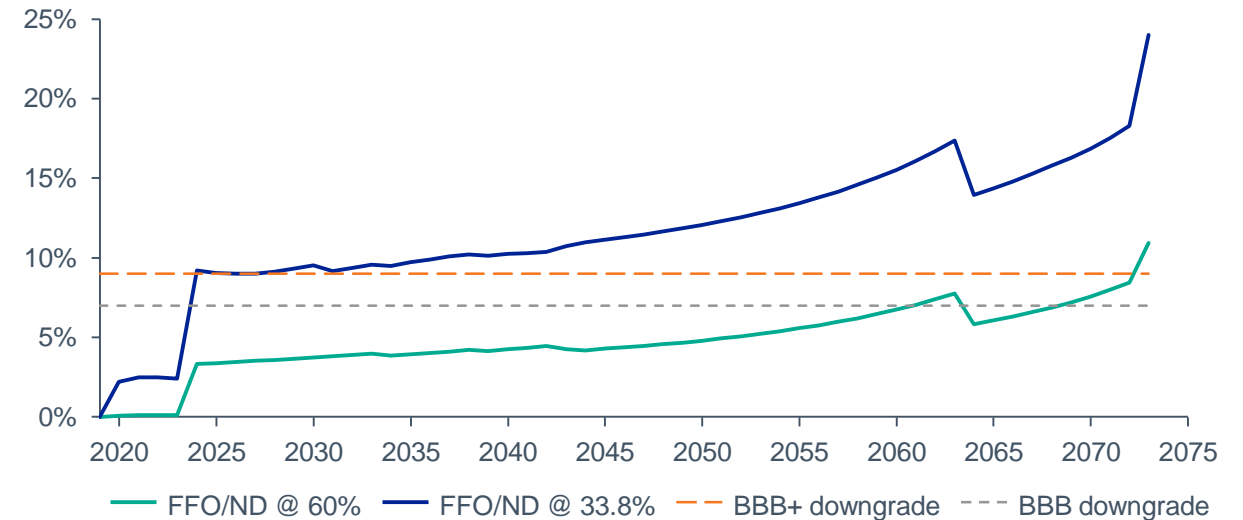
\$2B investment	Gearing ¹	Avg. FFO/ND in first 10 years ²	EIRR ³	EIRR + Gamma ³
Model firm gearing	60.0%	3.63%	6.04%	6.36%
Gearing to achieve minimum FFO/ND ⁴	33.8%	9.23%	5.13%	5.67%

1. Gearing is solved as a flat rate across all years.
2. Average in the 10 years post construction (FY24-33)
3. Project equity IRR, inclusive of terminal value
4. Adjusts gearing level to achieve FFO/ND > 9.0% post construction (ie. FY24-73)

Key Takeaways

- Stand-alone project with model firm gearing does not achieve credit metrics required to support BBB+ credit rating until post-2060.
- To achieve an FFO/ND of >9.0% post construction requires gearing of 33.8%. Equity return in this scenario falls to 5.67% (69bps below RORI target of 6.36%).

Output: Funds from Operations / Net Debt



Modelling Approach

- The modelling reflects a single investment staged over 5 years. For simplicity no ongoing investment (repex) is assumed.
- Cost of debt is calculated using a base rate forecast sourced from Bloomberg and a margin of 1.7% representing cost of financing for a BBB+ entity.
- Asset classes have been condensed, for simplicity.
- Depreciation for the investment capital is assumed to be on an 'As Commissioned' basis.
- A RAB multiple of 1x has been applied as a terminal value, to align with the PTRM.

2 Major Project plus 'as incurred' depreciation

Provides a higher FFO/ND during construction; No material change in gearing post-construction

Output: Project Returns

\$2B investment	Gearing ¹	Avg. FFO/ND in first 10 years ²	EIRR ³	EIRR + Gamma ³
Model firm gearing	60.0%	3.75%	6.00%	6.36%
Gearing to achieve minimum FFO/ND ⁴	33.1%	9.39%	5.10%	5.66%

1. Gearing is solved as a flat rate across all years.

2. Average in the 10 years post construction (FY24-33)

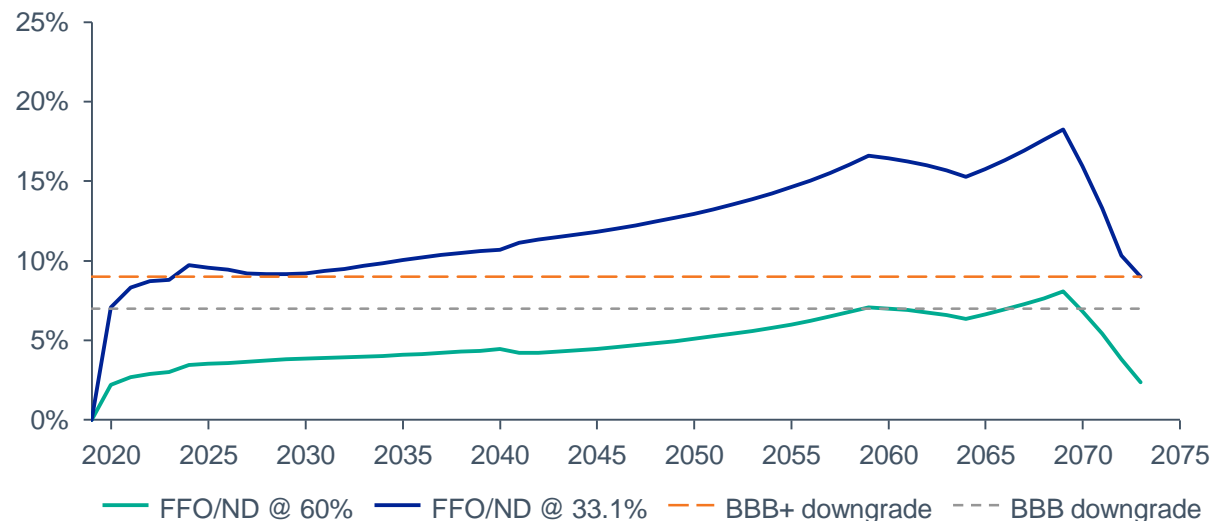
3. Project equity IRR, inclusive of terminal value

4. Adjusts gearing level to achieve FFO/ND > 9.0% post construction (ie. FY24-73)

Key Takeaways

- Depreciation as-incurred materially improves the project revenue profile during construction and subsequently reduces the project revenue in the final years. This leads to no material change in required gearing and equity return.
- The profile is largely unchanged during operation periods: to achieve an FFO/ND of >9.0% from 2025 requires gearing of 33.1%. The equity return in this scenario remains at 5.66% (70bps below RORI target of 6.36%).

Output: Funds from Operations / Net Debt



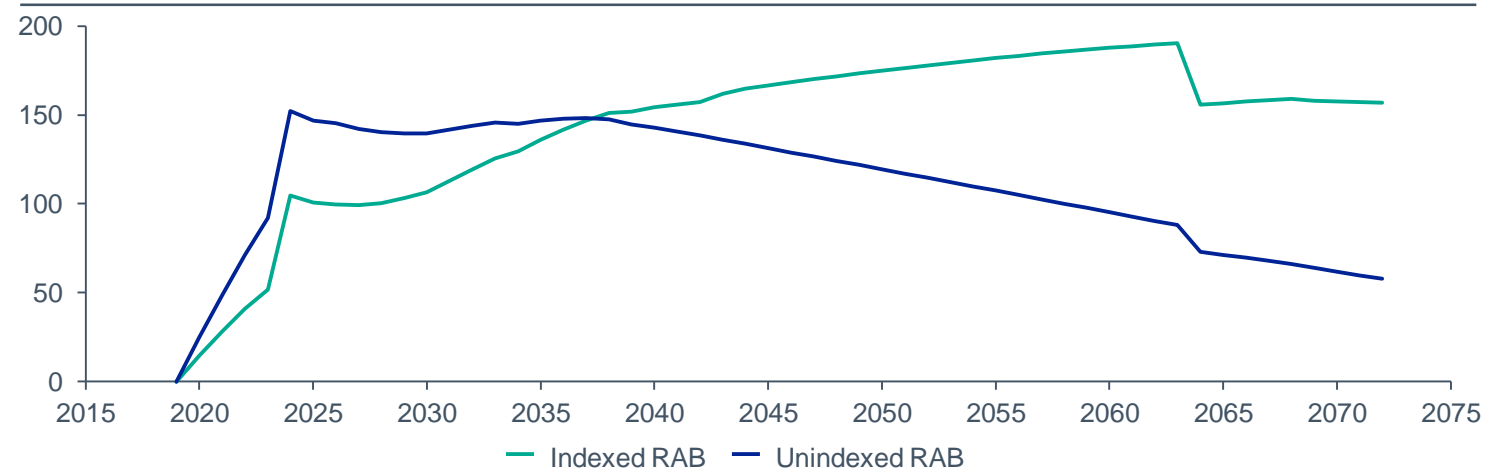
Modelling Approach

- Assumptions are consistent with Scenario 1 with the exception of how the investment capital is treated from a regulatory perspective.
- Investment capital is now treated on an 'As Incurred' basis, allowing the TNSP to commence depreciating the costs in 2020 as soon as expenditure occurs

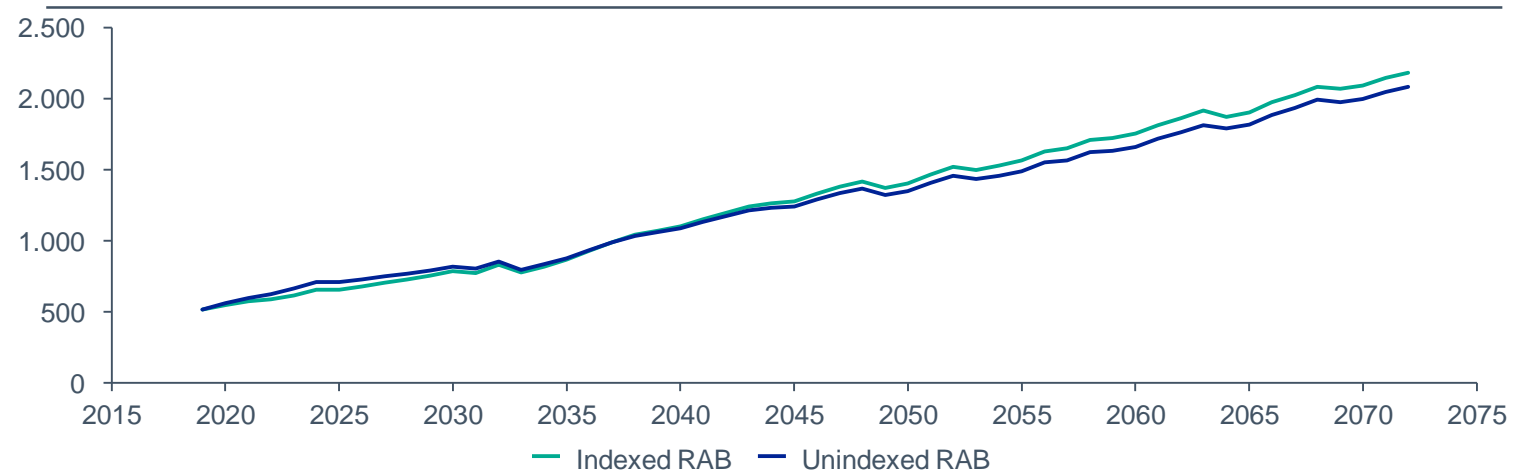
RAB Indexation

- Indexation of the RAB pushes revenue recovery of the RAB into the future to achieve intergenerational equity i.e. customers will pay the same amount in real terms for use of the asset over the life of the asset.
- Removing indexation of the RAB will increase short-term revenue due to a higher Return of Capital and Tax Allowance but subsequently will reduce long-term revenue due to a reduction in Return on Capital resulting from the lower RAB.
- Where removal of indexation has been applied it is only being applied only to the new investment project (the existing asset base RAB remains indexed). The graph, bottom right, illustrates the impact of indexing the new investment has when overlaid onto the existing asset base.
- The delta in the NPV of revenue forecast, between indexed and unindexed RAB, is zero when the nominal WACC in each year is used as discount rate.

Output: Revenue Profile (\$2B investment stand-alone)



Output: Revenue Profile (\$2B investment + \$6B existing RAB)



3 Major Project plus Removal of RAB Indexation

Supports gearing closer to the model firm than other scenarios (c.50%)

Output: Project Returns

\$2B investment	Gearing ¹	Avg. FFO/ND in first 10 years ²	EIRR ³	EIRR + Gamma ³
Model firm gearing	60.0%	7.21%	5.41%	6.36%
Gearing to achieve minimum FFO/ND ⁴	49.4%	9.30%	5.00%	5.94%

1. Gearing is solved as a flat rate across all years.

2. Average in the 10 years post construction (FY24-33)

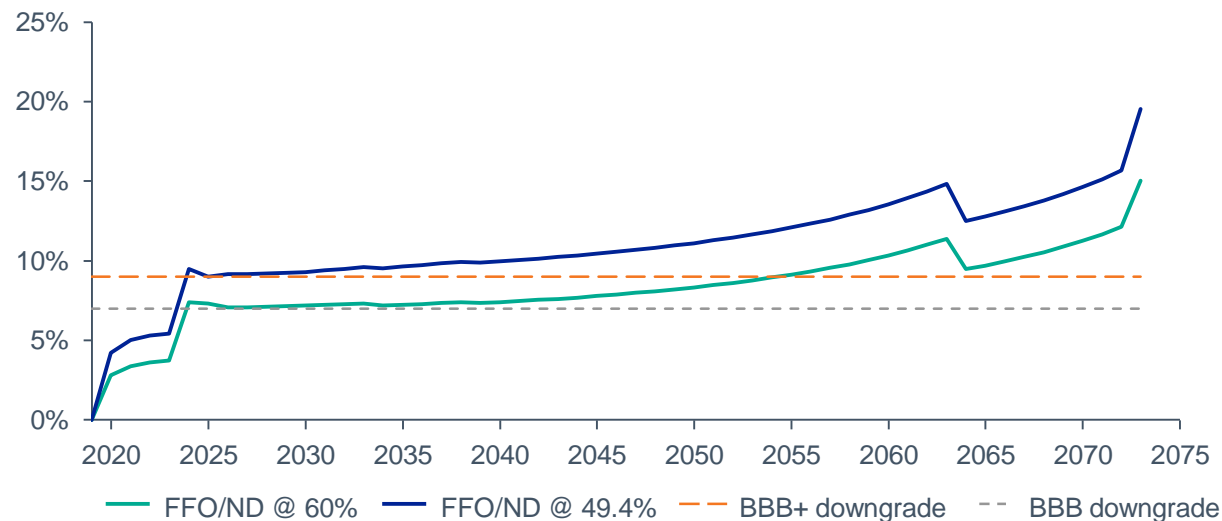
3. Project equity IRR, inclusive of terminal value

4. Adjusts gearing level to achieve FFO/ND > 9.0% post construction (ie. FY24-73)

Key Takeaways

- Adopting to remove RAB indexation results in higher upfront revenue due to the increase in Return of Capital and Tax Allowance.
- Long-term RAB is significantly reduced resulting in lower outer year revenues.
- The delta in the NPV of revenue forecast, between indexed and unindexed RAB, is zero.
- The change limits the reduction in gearing levels that are required to sustain an FFO/ND > 9.0%

Output: Funds from Operations / Net Debt



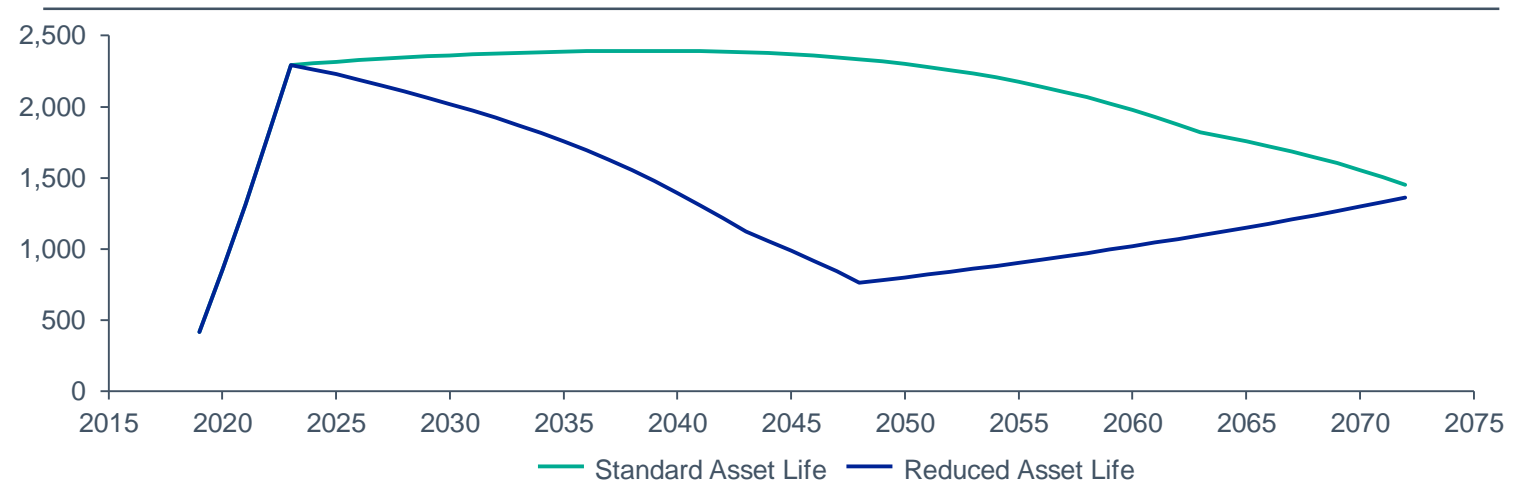
Modelling Approach

- Assumptions are consistent with Scenario 1 with the exception of how RAB and depreciation are derived.
- Depreciation of capital is now being depreciated in nominal terms rather than in real terms. Meanwhile, the Opening RAB value is no longer adjusted by inflation.

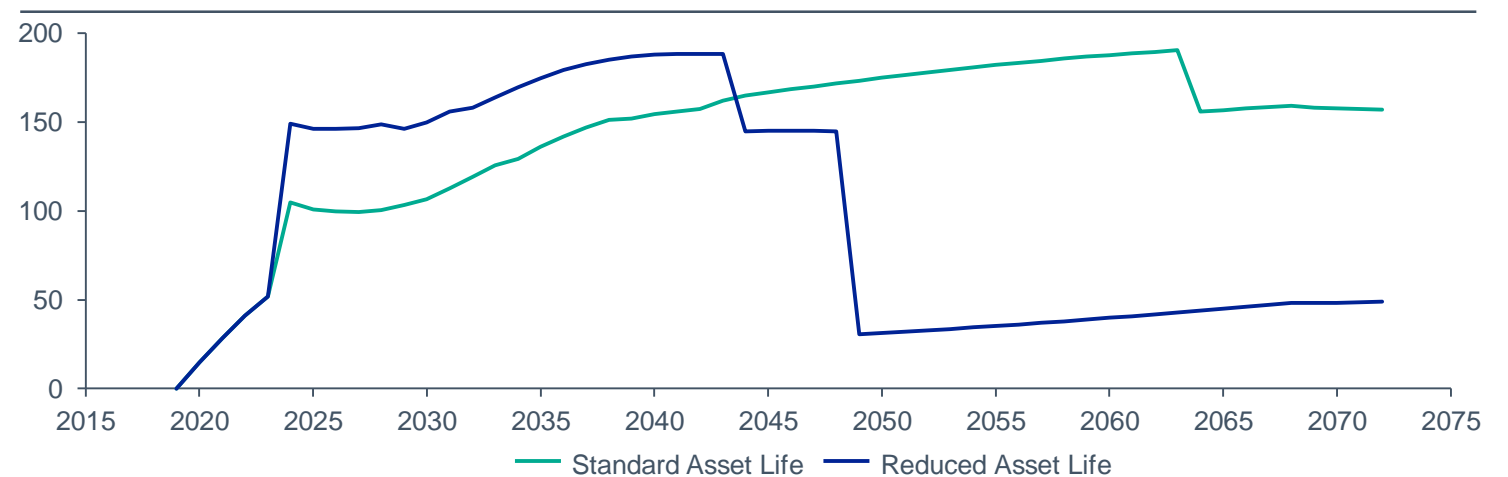
Reduced Asset Life

- The effective asset life for the new investment has been reduced by 50%, and is only applied to the RAB. Tax depreciation does not apply the reduced asset life
- Reducing the asset life brings forward revenue through an increase in Return of Capital and Tax Allowance.
- Reducing the asset life results in a faster decline in the RAB once construction is completed, reducing the Return on Capital. Once all assets have been depreciated (i.e. FY48) there is a point of inflection and the RAB begins to increase at a rate equal to inflation.
- The reduced asset life is applied only to the new investment project and is not applied to any ongoing investments on the existing asset base (ie. replacement capex).

Output: Closing RAB Profile (\$2B investment stand-alone)



Output: Revenue Profile (\$2B investment stand-alone)



4 Major Project plus Reduced Asset Life

Supports gearing of 20.9% due to significant reduction in headroom Post FY48

Output: Project Returns

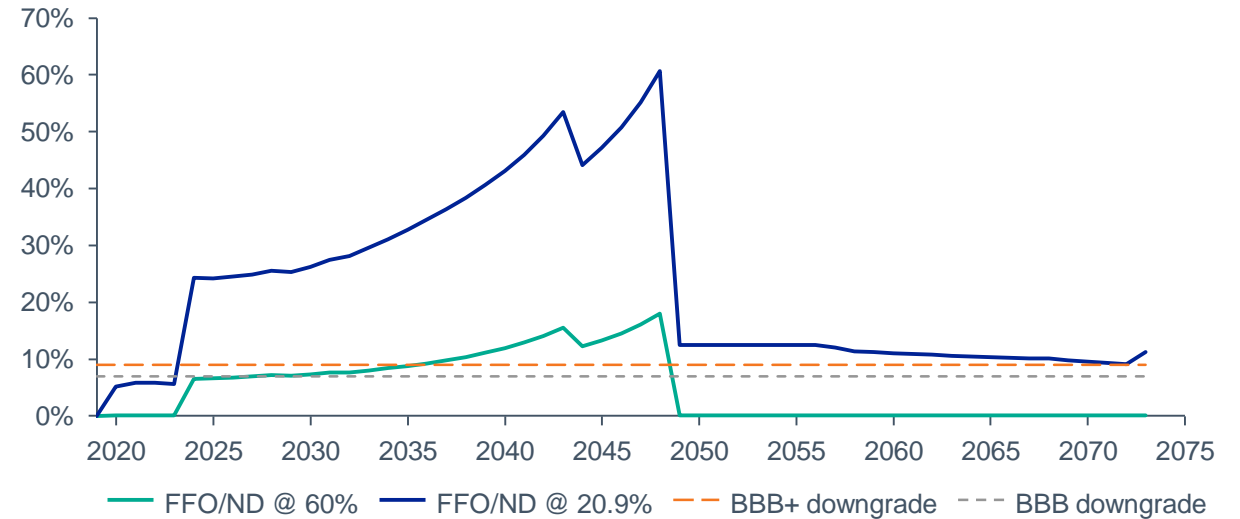
\$2B investment	Gearing ¹	Avg. FFO/ND in first 10 years ²	EIRR ³	EIRR + Gamma ³
Model firm gearing	60.0%	7.20%	5.41%	6.36%
Gearing to achieve minimum FFO/ND ⁴	20.9%	26.01%	4.54%	5.38%

1. Gearing is solved as a flat rate across all years.
2. Average in the 10 years post construction (FY24-33)
3. Project equity IRR, inclusive of terminal value
4. Adjusts gearing level to achieve FFO/ND > 9.0% post construction (ie. FY24-73)

Key Takeaways

- Reduction of asset life leads to increased short-term revenue resulting from an increased Return of Capital and Tax Allowance.
- Revenues significantly decrease once all capital has been depreciated. This causes the FFO to Net Debt ratio to flat line as revenue does not offset the required interest expense.
- Due to the significant revenue reduction post FY48, reducing the asset life actually decreases the level of gearing that can sustain an FFO/ND > 9.0% over the life of the assets (without support / cross-subsidy from an existing asset base).

Output: Funds from Operations / Net Debt



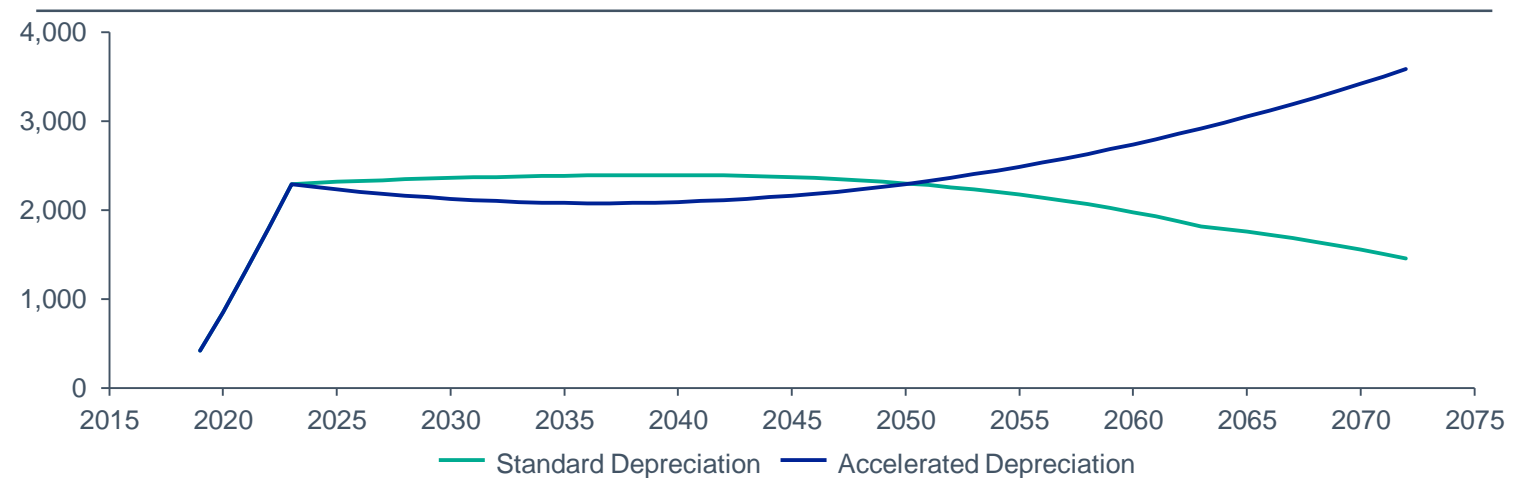
Modelling Approach

- Assumptions are consistent with Scenario 1 with the exception of the period that capex is being depreciated over.
- For each asset class, the effective life has been halved (i.e. reduced by 50%) and rounded to the nearest whole number.
- Debt is maintained as 60% of RAB, consistent across all scenarios.
- Similar to the RAB profile as shown in the prior slide, c.65% of the debt is amortized by FY48; Post FY48, the residual debt is supported by limited FFO as regulatory assets are fully depreciated except land and easements; as a result the FFO/ND ratio is significantly lower than earlier years.

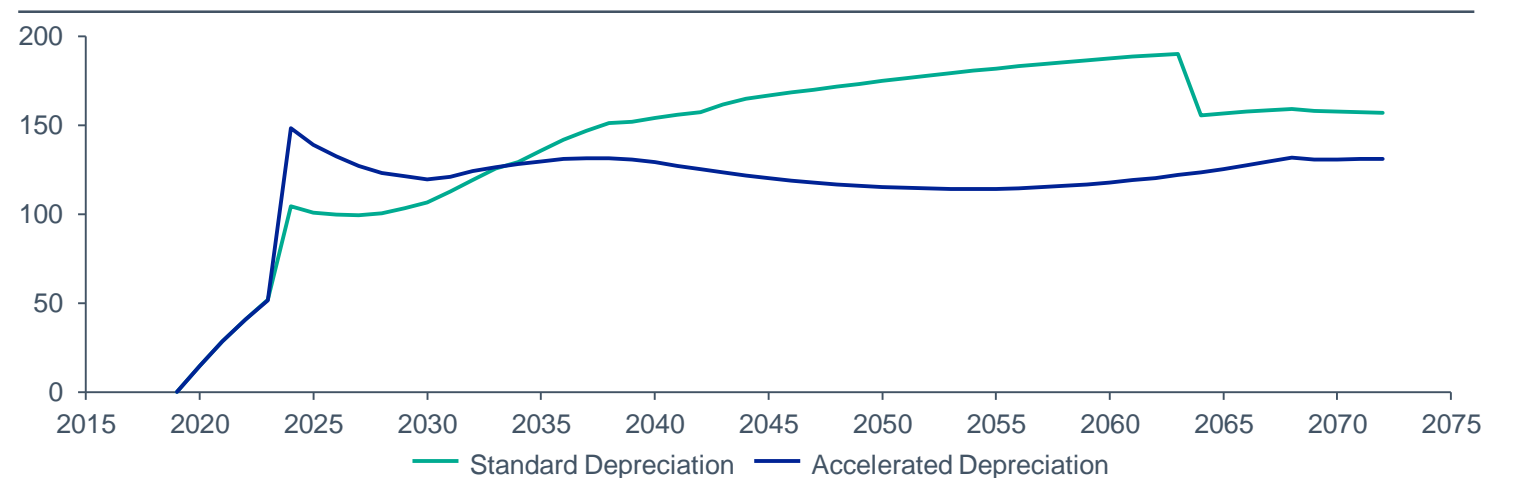
Accelerated Depreciation

- Depreciation is now adopting a double diminishing value approach rather than a straight line approach. This approach is similar to the approach used to determine the tax depreciable amount.
- Accelerating depreciation increases short-term revenue through an increased Return of Capital and Tax Allowance.
- Accelerated depreciation is only applied to the new investment project and is not applied to any ongoing investments on the existing asset base (ie. replacement capex).

Output: Closing RAB Profile (\$2B investment stand-alone)



Output: Revenue Profile (\$2B investment stand-alone)



5 Major Project plus Accelerated Depreciation

Does not achieve BBB+ credit metrics at model firm gearing over the life of the project

Output: Project Returns

\$2B investment	Gearing ¹	Avg. FFO/ND in first 10 years ²	EIRR ³	EIRR + Gamma ³
Model firm gearing	60.0%	5.74%	6.25%	6.36%
Gearing to achieve minimum FFO/ND ⁴	20.2%	21.97%	5.02%	5.50%

1. Gearing is solved as a flat rate across all years.

2. Average in the 10 years post construction (FY24-33)

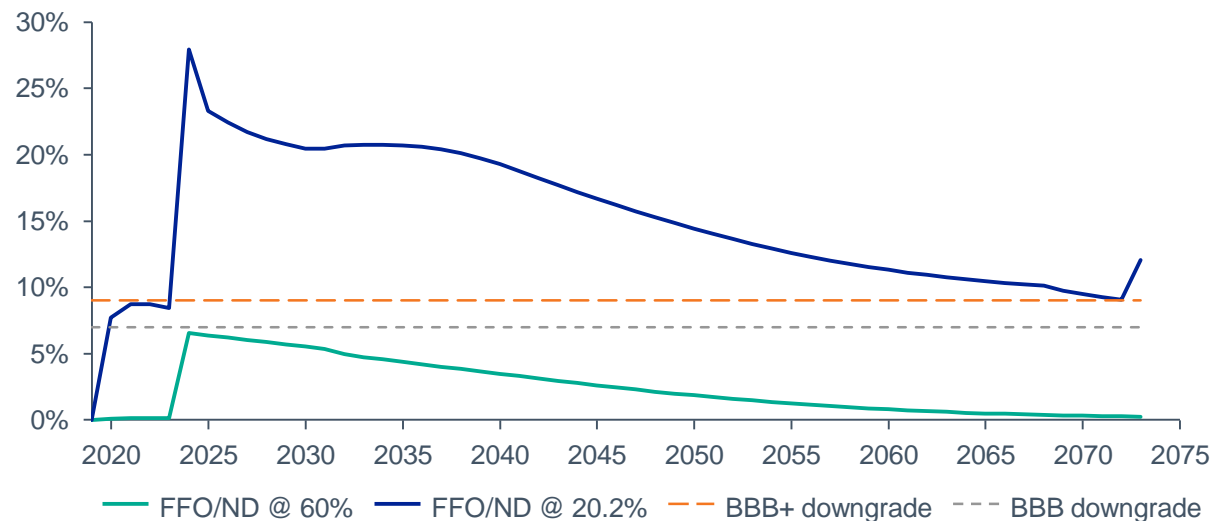
3. Project equity IRR, inclusive of terminal value

4. Adjusts gearing level to achieve FFO/ND > 9.0% post construction (ie. FY24-73)

Key Takeaways

- Adopting a diminishing value approach front-ends the regulated revenue resulting from an increased Return of Capital and Tax Allowance.
- Long term RAB is significantly larger than the major project only case (i.e. Scenario 1). This is a result of depreciation being lower than assumed inflation on the opening RAB balance post FY37.
- The change improves the level of gearing that can sustain an FFO/ND > 9.0% immediately post-construction, however this diminishes over time as revenue falls

Output: Funds from Operations / Net Debt



Modelling Approach

- Assumptions are consistent with Scenario 1 with the exception of how depreciation is being derived.
- Depreciation is now adopting a double diminishing value approach rather than a straight line approach. This is consistent with the approach used for determining the Tax depreciable amount however, does not write-off any residual undepreciated amount in FY73.

Existing RAB

Key assumptions

We have adopted the following assumptions:

1. An existing asset base of c.\$6 billion at 30 June 2018 has been included when assessing the impact of the additional investment capital on financeability.
2. Ongoing replacement capex of c.\$1.5bn every five years are also assumed for all regulatory periods.
3. Rate of Return Instrument parameters are applied for: Cost of equity (6.36%); Leverage (60%); Inflation (2.45%) and Imputation Credits (58.5%);
4. Tax depreciation, for simplicity, applies diminishing value for new capex and straight line to the opening RAB.
5. Cost of Debt is based on a 10-year trailing average, using the assumed base rate from Bloomberg;

The analysis is indicative and the following assumptions are made for simplicity reasons:

6. Exclude elements such as:
 - a) Debt and equity raising cost;
 - b) Revenue smoothing and other revenue adjustments;
 - c) Operating expenditure;
7. Assume no mismatch between forecast and actual inflation;
8. Building block revenues have been used rather than smoothed revenue;
9. Debt drawdown and repayment have been calculated based on a target gearing debt level as consistent with the PTRM model published by the AER;
10. Capex “as commissioned” is the same as capex “as incurred” for the existing business.

6 Existing RAB

48.8% gearing is required to achieve BBB+ credit metrics

Output: Project Returns

Existing RAB + \$2B investment	Gearing ¹	Avg. FFO/ND in first 10 years ²	EIRR ³	EIRR + Gamma ³
Model firm gearing	60.0%	7.83%	5.57%	6.36%
Gearing to achieve minimum FFO/ND ⁴	48.8%	10.27%	5.21%	6.02%

1. Gearing is solved as a flat rate across all years.

2. Average in the 10 years post construction (FY24-33)

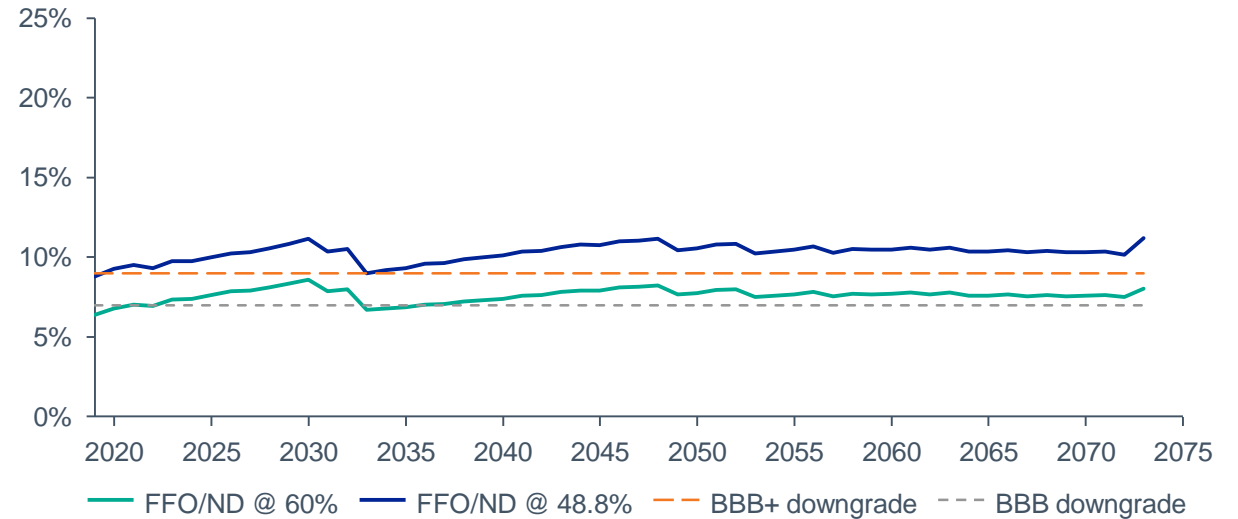
3. Project equity IRR, inclusive of terminal value

4. Adjusts gearing level to achieve FFO/ND > 9.0% post construction (ie. FY24-73)

Key Takeaways

- An existing \$6B RAB and cashflow profile is better able to support the target model firm gearing, but still struggles to deliver credit metrics to adequately support a BBB+ credit rating
- Gearing of 48.8% is required to deliver 9.0% FFO/ND, resulting in an equity IRR of 6.02% (34bps below the RORI target of 6.36%)

Output: Funds from Operations / Net Debt



Modelling Approach

- The TransGrid PTRM for the FY19-23 determination was used to derive the existing asset base value, reflecting TransGrid's opening RAB as at FY19.
- Ongoing replacement capex in relation to the existing RAB has been assumed. The assumed forecast takes TransGrid's FY19-23 determination allowance and assumes the same allowance for every subsequent determination, in real terms. No growth assumptions have been overlaid.
- Remaining life assumptions have been rounded, for simplicity.
- A terminal value RAB multiple of 1x has been applied, aligned with the PTRM.
- Step changes in the FFO/ND profile in certain years (eg. 2034) are a result of certain asset classes being completely depreciated at that point in time.

7 Existing RAB + Major Project

46% gearing required to achieve BBB+ credit metrics

Output: Project Returns

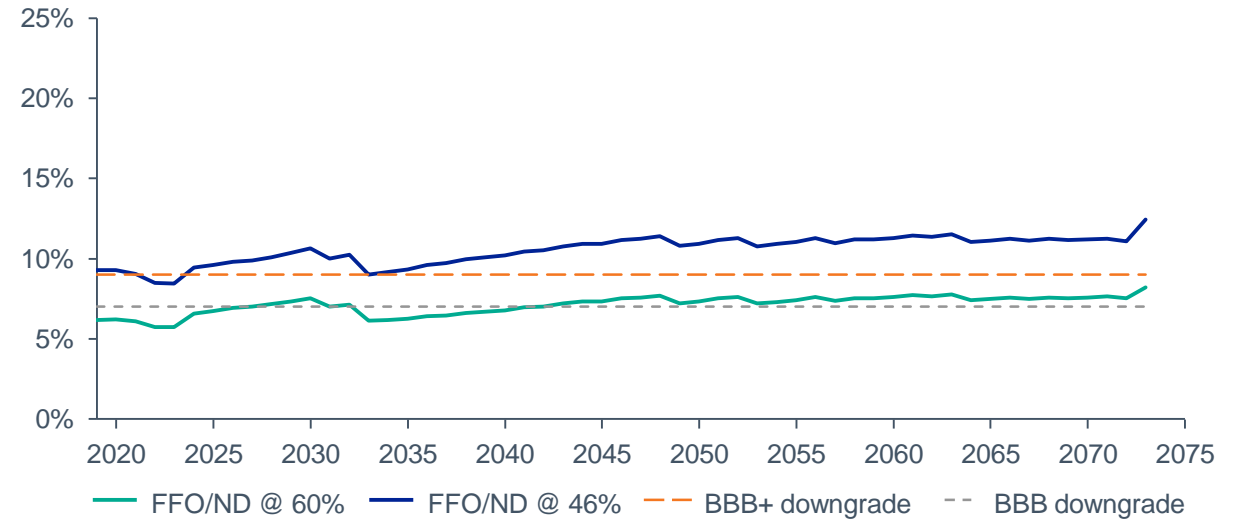
Existing RAB + \$2B investment	Gearing ¹	Avg. FFO/ND in first 10 years ²	EIRR ³	EIRR + Gamma ³
Model firm gearing	60.0%	6.95%	5.66%	6.36%
Gearing to achieve minimum FFO/ND ⁴	46.0%	9.91%	5.19%	5.94%

1. Gearing is solved as a flat rate across all years.
2. Average in the 10 years post construction (FY24-33)
3. Project equity IRR, inclusive of terminal value
4. Adjusts gearing level to achieve FFO/ND > 9.0% post construction (ie. FY24-73)

Key Takeaways

- Adding the \$2B investment onto the existing RAB reduces the credit metrics in the overall business, which fall below 7.0% until FY2026
- To achieve an FFO/ND of >9.0% post construction requires gearing of 46.0%. Equity return in this scenario falls to 5.94% (42bps below RORI target of 6.36%)

Output: Funds from Operations / Net Debt



Modelling Approach

- The TransGrid PTRM for the FY19-23 determination was used to derive the existing asset base value, reflecting TransGrid's opening RAB as at FY19.
- Ongoing replacement capex in relation to the existing RAB has been assumed. The assumed forecast takes TransGrid's FY19-23 determination allowance and assumes the same allowance for every subsequent determination, in real terms. No growth assumptions have been overlaid.
- Capital expenditure, relating to both the existing and investment case, is depreciated on an "As Commissioned" basis.
- Remaining life assumptions have been rounded, for simplicity.
- A terminal value RAB multiple of 1x has been applied, aligned with the PTRM
- FFO/ND and free cashflow declines in certain years (eg. 2034) are a result of certain asset classes being completely depreciated, at that point in time.

8 Existing RAB + Major Project + 'as incurred' depreciation on the project only

Improves FFO/ND during construction; No material change in gearing post-construction

Output: Project Returns

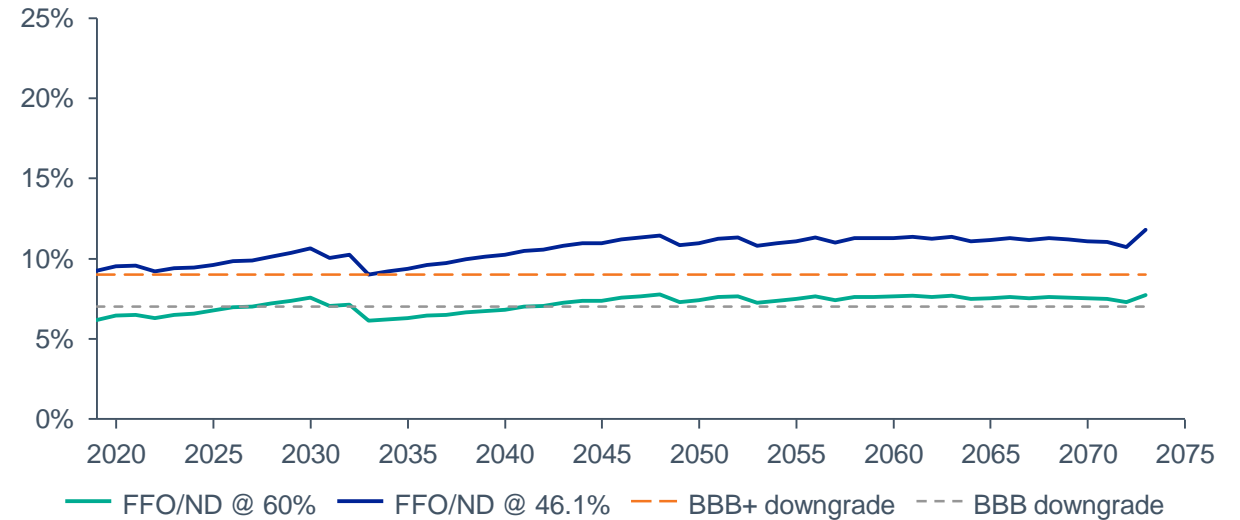
Existing RAB + \$2B investment	Gearing ¹	Avg. FFO/ND in first 10 years ²	EIRR ³	EIRR + Gamma ³
Model firm gearing	60.0%	6.98%	5.65%	6.36%
Gearing to achieve minimum FFO/ND ⁴	46.1%	9.92%	5.19%	5.95%

1. Gearing is solved as a flat rate across all years.
2. Average in the 10 years post construction (FY24-33)
3. Project equity IRR, inclusive of terminal value
4. Adjusts gearing level to achieve FFO/ND > 9.0% post construction (ie. FY24-73)

Key Takeaways

- Adopting an 'As Incurred' approach to investment capital only increases revenue in the short term, flattening the FFO/ND curve and resulting in a small (0.08%) increase in average FFO/ND in the first 10 years.
- To achieve an FFO/ND of >9.0% post construction requires gearing of 46.1%. Equity return in this scenario is 5.95% (41bps below RORI target of 6.36%).

Output: Funds from Operations / Net Debt



Modelling Approach

- The TransGrid PTRM for the FY19-23 determination was used to derive the existing asset base value, reflecting TransGrid's opening RAB as at FY19.
- Ongoing replacement capex in relation to the existing RAB has been assumed. The assumed forecast takes TransGrid's FY19-23 determination allowance and assumes the same allowance for every subsequent determination, in real terms. No growth assumptions have been overlaid.
- Existing BAU capital is depreciation on an "As Commissioned" basis whereas, investment capital is depreciation on an "As Incurred" basis.
- Remaining life assumptions have been rounded, for simplicity.
- A terminal value RAB multiple of 1x has been applied, aligned with the PTRM.
- FFO/ND and free cashflow declines in certain years (eg. 2034) are a result of certain asset classes being completely depreciated, at that point in time.

9 Existing RAB + Major Project + Removal of RAB Indexation

Gearing can be increased to 49.4% while still achieving BBB+ credit metrics

Output: Project Returns

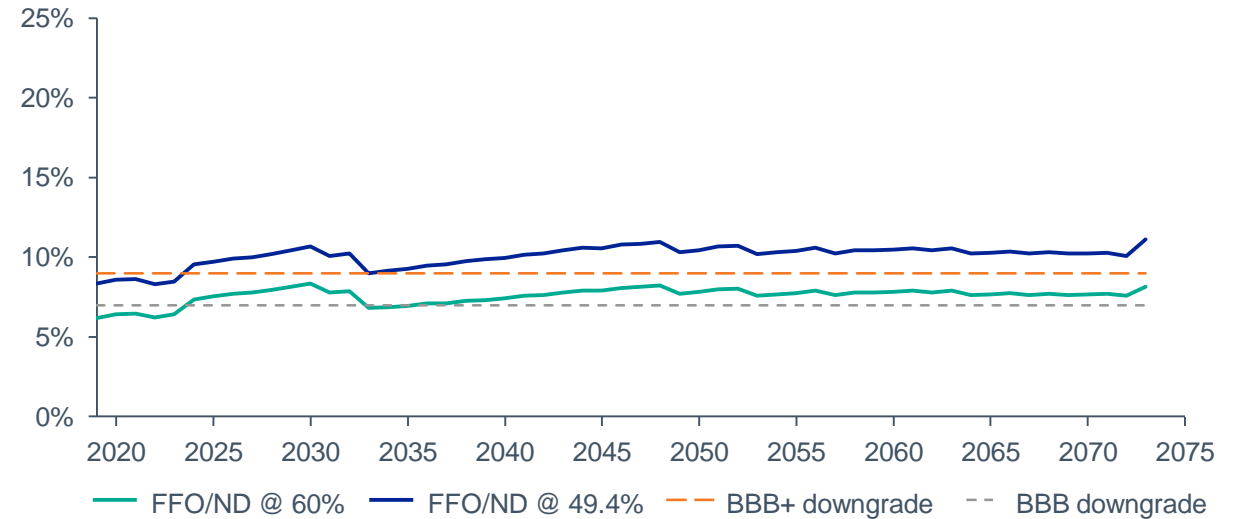
Existing RAB + \$2B investment	Gearing ¹	Avg. FFO/ND in first 10 years ²	EIRR ³	EIRR + Gamma ³
Model firm gearing	60.0%	7.73%	5.54%	6.36%
Gearing to achieve minimum FFO/ND ⁴	49.4%	9.98%	5.19%	6.02%

1. Gearing is solved as a flat rate across all years.
2. Average in the 10 years post construction (FY24-33)
3. Project equity IRR, inclusive of terminal value
4. Adjusts gearing level to achieve FFO/ND > 9.0% post construction (ie. FY24-73)

Key Takeaways

- Removal of RAB indexation is only applied to major project capital. This increases short-term revenue due to a higher Return of Capital and Tax Allowance; longer term revenue is lower due to a reduction in Return on Capital resulting from the lower RAB.
- This translates into a short term increase in the FFO to Net Debt Ratio and ability to support gearing closer to model firm levels
- To achieve an FFO/ND of >9.0% post construction requires gearing of 49.4%. Equity return (incl. Gamma) in this scenario is 6.02% (34bps below RORI target of 6.36%).

Output: Funds from Operations / Net Debt



Modelling Approach

- The TransGrid PTRM for the FY19-23 determination was used to derive the existing asset base value, reflecting TransGrid's opening RAB as at FY19.
- Ongoing replacement capex in relation to the existing RAB has been assumed. The assumed forecast takes TransGrid's FY19-23 determination allowance and assumes the same allowance for every subsequent determination, in real terms. No growth assumptions have been overlaid.
- Indexation of the RAB has been removed for major project capital.
- Remaining life assumptions have been rounded, for simplicity.
- A terminal value RAB multiple of 1x has been applied, aligned with the PTRM.
- FFO/ND and free cashflow declines in certain years (eg. 2034) are a result of certain asset classes being completely depreciated, at that point in time.

10 Existing RAB + Major Project + Reduced Asset Life

Gearing can be increased to 49.8% while still achieving BBB+ credit metrics

Output: Project Returns

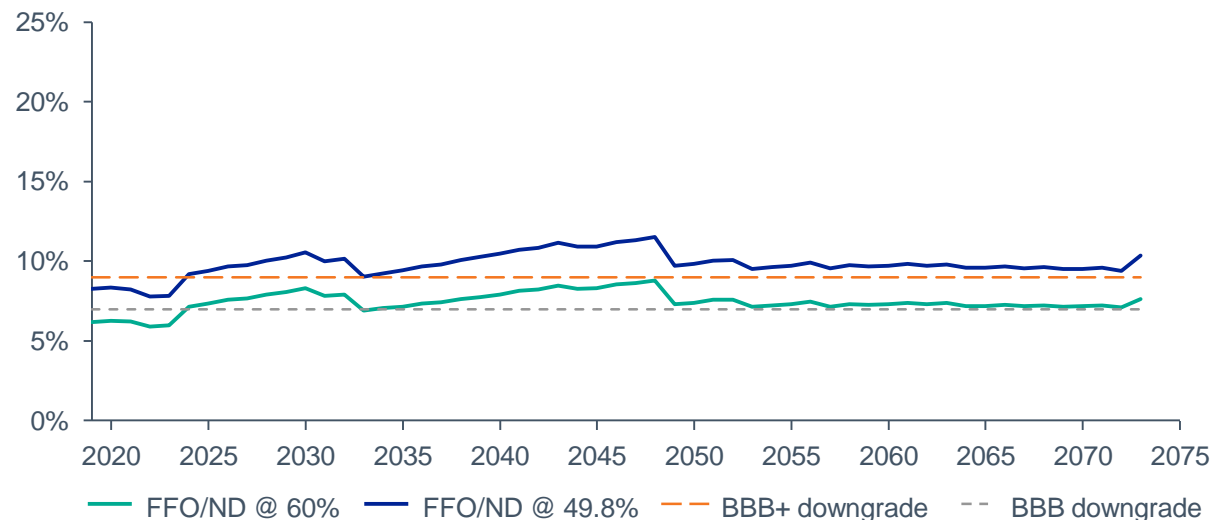
Existing RAB + \$2B investment	Gearing ¹	Avg. FFO/ND in first 10 years ²	EIRR ³	EIRR + Gamma ³
Model firm gearing	60.0%	7.66%	5.57%	6.36%
Gearing to achieve minimum FFO/ND ⁴	49.8%	9.80%	5.22%	6.03%

1. Gearing is solved as a flat rate across all years.
2. Average in the 10 years post construction (FY24-33)
3. Project equity IRR, inclusive of terminal value
4. Adjusts gearing level to achieve FFO/ND > 9.0% post construction (ie. FY24-73)

Key Takeaways

- Reduction in asset life has been applied to the major project capital only.
- In the short term, this increases revenue (i.e. Return of Capital and Tax Allowance) increasing the FFO to Net Debt Ratio
- To achieve an FFO/ND of >9.0% post construction requires gearing of 49.8%. Equity return in this scenario is 6.03% (33bps below RORI target of 6.36%).

Output: Funds from Operations / Net Debt



Modelling Approach

- The TransGrid PTRM for the FY19-23 determination was used to derive the existing asset base value, reflecting TransGrid's opening RAB as at FY19.
- Ongoing replacement capex in relation to the existing RAB has been assumed. The assumed forecast takes TransGrid's FY19-23 determination allowance and assumes the same allowance for every subsequent determination, in real terms. No growth assumptions have been overlaid.
- For each asset class, the effective life has been halved (i.e. reduced by 50%).
- Remaining life assumptions have been rounded, for simplicity.
- A terminal value RAB multiple of 1x has been applied, aligned with the PTRM.
- FFO/ND and free cashflow declines in certain years (eg. 2034) are a result of certain asset classes being completely depreciated, at that point in time.

11 Existing RAB + Major Project + Accelerated Depreciation

Will support gearing of 47.0% while still achieving BBB+ credit metrics

Output: Project Returns

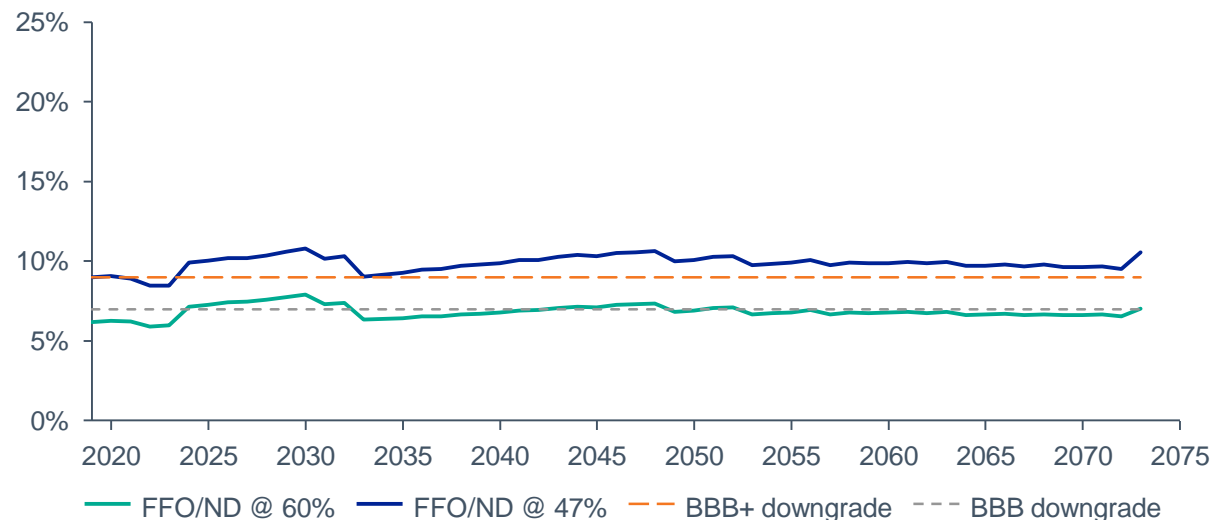
Existing RAB + \$2B investment	Gearing ¹	Avg. FFO/ND in first 10 years ²	EIRR ³	EIRR + Gamma ³
Model firm gearing	60.0%	7.35%	5.69%	6.36%
Gearing to achieve minimum FFO/ND ⁴	47.0%	10.15%	5.24%	5.97%

1. Gearing is solved as a flat rate across all years.
2. Average in the 10 years post construction (FY24-33)
3. Project equity IRR, inclusive of terminal value
4. Adjusts gearing level to achieve FFO/ND > 9.0% post construction (ie. FY24-73)

Key Takeaways

- The acceleration of diminishing value depreciation has only been applied to the major project capital.
- In the short term this increases revenue (i.e. Return of Capital and Tax Allowance) increasing the FFO to Net Debt Ratio.
- To achieve an FFO/ND of >9.0% post construction requires gearing of 47.0%. Equity return in this scenario is 5.97% (39bps below RORI target of 6.36%).

Output: Funds from Operations / Net Debt



Modelling Approach

- The TransGrid PTRM for the FY19-23 determination was used to derive the existing asset base value, reflecting TransGrid's opening RAB as at FY19.
- Ongoing replacement capex in relation to the existing RAB has been assumed. The assumed forecast takes TransGrid's FY19-23 determination allowance and assumes the same allowance for every subsequent determination, in real terms. No growth assumptions have been overlaid.
- Depreciation is now adopting a double diminishing value approach rather than a straight line approach. This is consistent with the approach used for determining the Tax depreciable amount however, does not write-off any residual undepreciated amount in FY73.
- Remaining life assumptions have been rounded, for simplicity.
- A terminal value RAB multiple of 1x has been applied, aligned with the PTRM.
- FFO/ND and free cashflow declines in certain years (eg. 2034) are a result of certain asset classes being completely depreciated, at that point in time.