

AER Basslink consultation paper

APA initial response

10 September 2024

APA
Australia's energy
infrastructure partner



Acknowledgement of Country

At APA, we acknowledge the Traditional Owners and Custodians of the lands on which we live and work throughout Australia.

We acknowledge their connections to land, sea and community.

We pay our respects to their Elders past and present, and commit to ensuring APA operates in a fair and ethical manner that respects First Nations peoples' rights and interests.

Overview



Overview of Basslink and application for conversion



APA acquired Basslink in October 2022 - our objective is to support communities, businesses and customers with an energy system that is reliable, affordable, and low emissions. We are focused on ensuring Basslink is a sustainable operation and can continue to deliver the reliable electricity that Tasmanian and Victorian households and businesses depend on every day.



While regulation is not always the right answer, APA is confident that converting Basslink to a regulated asset will ensure that it operates in an economically efficient manner as an 'open link' that maximises the energy transported between Victoria and Tasmania for the long-term benefit of customers.



It is for this reason that in September 2023, APA applied to the Australian Energy Regulator (AER) to have Basslink regulated. The AER is assessing APA's application and has commissioned modelling to quantify the benefits of regulation. This modelling by ACIL Allen demonstrated that regulation will better align the interests of APA, customers and efficient market outcomes.

AER consultation paper and modelling released

The AER is seeking stakeholder views on a number of questions

- On 30 August 2024¹, the AER released a Consultation Paper and modelling undertaken by ACIL Allen.
- The AER is seeking stakeholder views on a range of questions including:
 - the types of benefits conversion may provide;
 - the impact of uncertainty on the decision to regulate;
 - the significance of quantified market modelling vs other inputs on the decision to convert;
 - the weighting to place on various counterfactual scenarios modelled; and
 - the impact of regulation on reliability and/or security of supply risks.
- We recognise the challenges inherent in modelling realistic scenarios for Basslink operating under regulation vs a strategically-bid counterfactual.
- This submission interprets the ACIL Allen modelling results through the lens of the National Electricity Objective and the consumer impacts of regulation.



1. [Consultation Paper: Basslink conversion | Australian Energy Regulator \(AER\)](#)

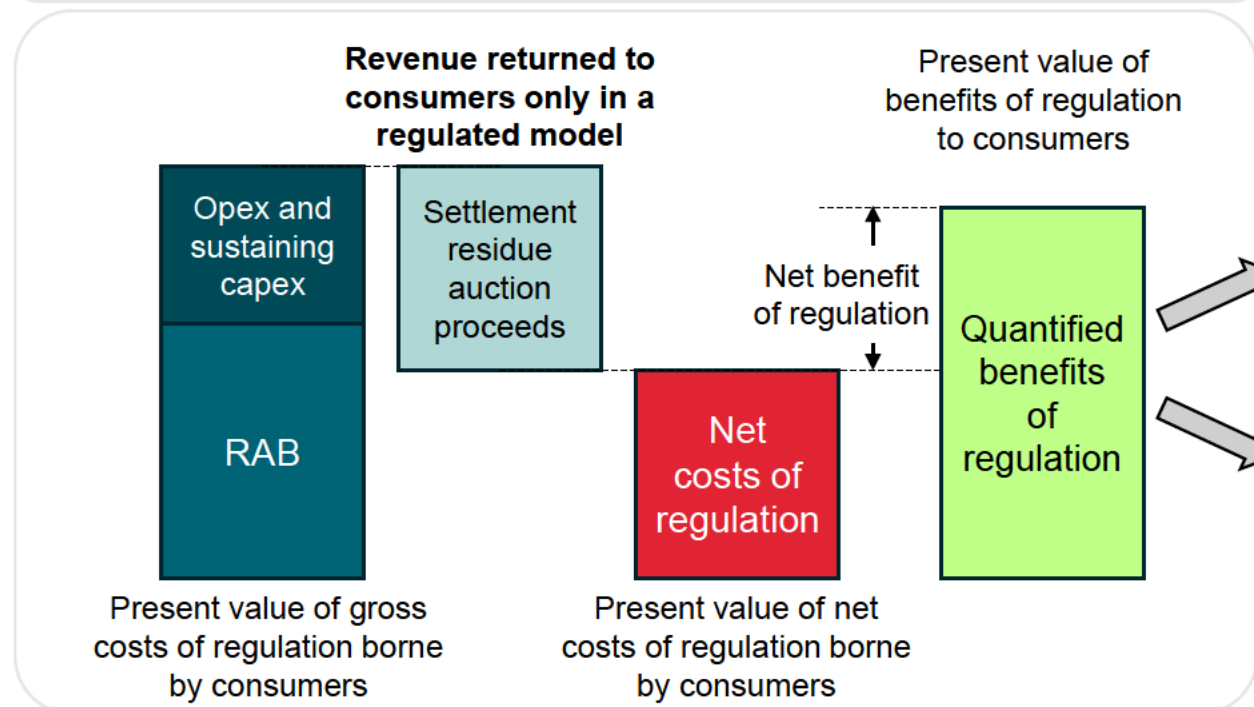
The ACIL Allen modelling aims to quantify the benefits of regulation against the unregulated (MNSP) counterfactual

The National Electricity Objective (NEO) outlines the relevant long-term interests of consumers against which conversion should be tested

The NEO is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

- **price**, quality, safety and **reliability and security of supply** of electricity; and
- the reliability, safety and security of the national electricity system; and
- the achievement of targets set by a participating jurisdiction for **reducing Australia's greenhouse gas emissions**; or that are likely to contribute to reducing Australia's greenhouse gas emissions.

Quantitative assessment of the net costs of regulation against the benefits



Modelled categories of benefits



Modelled “**consumer benefits**” of conversion represent the savings in wholesale electricity costs (**prices**) and **emissions** costs under regulation



Modelled “**market benefits**” of conversion represent generator savings in short-run marginal costs (fuel, **emissions** and variable operations and maintenance costs) under regulation

Modelled **consumer benefits** capture the relevant elements of the NEO and are the appropriate quantitative basis on which to assess conversion.

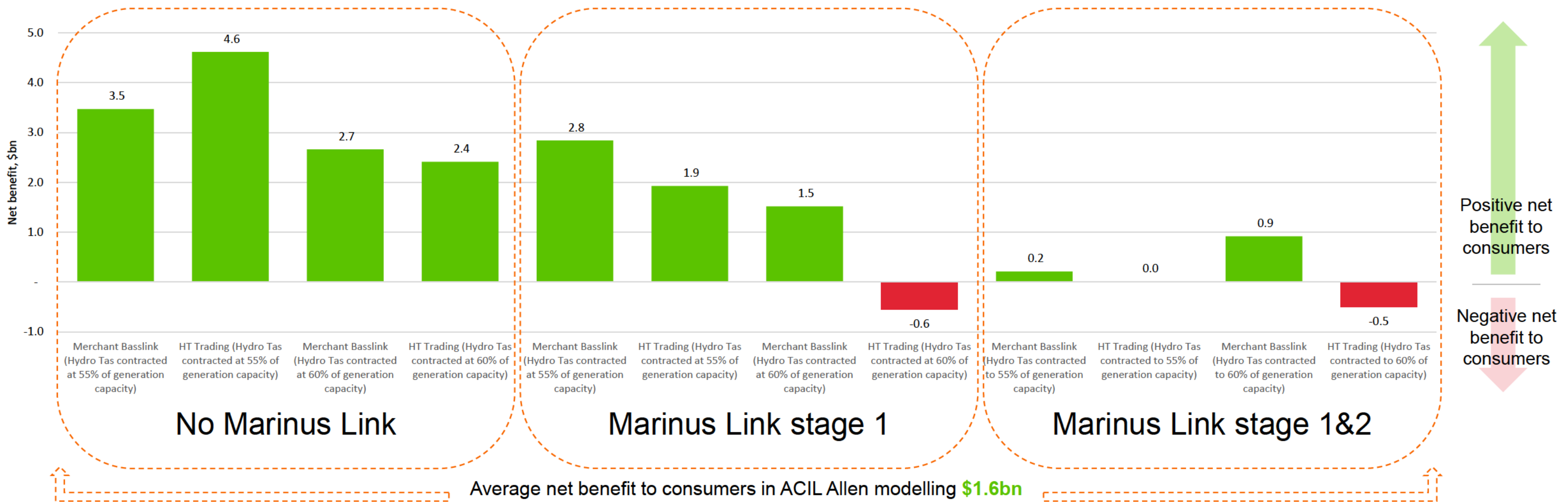
Modelled consumer net benefits



The average **net benefit of regulation to consumers** across the twelve comparator scenarios over the period 2025-2050 is **\$1.6bn**



The **consumer benefits** of regulation exceeded the net consumer costs in **ten of the twelve** comparator scenarios as modelled



Key concerns with the interpretation of modelling results

APA notes the following points are relevant to the analysis of the modelling in the AER Consultation Paper



Apparent variability in **consumer benefits** is not a reason to discard the results. This category of benefit **captures the relevant interests of consumers in the NEO** and is targeted at answering the relevant question of net changes in consumer costs if Basslink is regulated. The modelled **market benefits are not responsive to this key question.**



While the AER consultation paper includes discussion of the offsetting effect of **Settlement Residue Auction proceeds**, the modelling and presented results do not combine these with gross costs to **assess net costs against the benefits**. This is the appropriate comparison to make when assessing conversion.



The AER consultation paper analysis **excludes the modelled 'No Marinus Link'** scenarios. We note that the modelled Marinus Link scenarios assume the completion of Marinus Link stage 1 18 months earlier than the proponent's current forecast and the AEMO ISP. All scenarios should be included to ensure a balanced, pragmatic result. In particular, some weighting must be given to the (certain) possibility of a **delay to Marinus Link beyond the modelled start date.**

Summary – consumer benefits vs market benefits



Net “**consumer benefits**” of conversion (that is, net decreases/increases in consumer energy costs covering wholesale prices and transmission costs) between regulated and unregulated scenarios are the appropriate quantitative basis on which to assess conversion.



The **Settlement Residue Auction** (SRA) revenues must be taken into account when calculating the transmission cost to consumers. This revenue is only returned to consumers in a regulated model and needs to be deducted from the gross costs to see an accurate depiction of the cost to consumers of regulation



The differences in the “**market benefits**” between comparable regulated and unregulated scenarios are low due to the assumptions of fixed generation build and high renewable penetration NEM-wide.

The modelled “**market benefits**” of conversion **do not model the impact on wholesale electricity prices**. Instead, they model changes in short run marginal costs (SRMC) (savings in fuel, variable O&M and emissions), which are not reflective of changes in wholesale electricity prices in a highly renewable system.

These benefits are not an appropriate basis on which to assess either conversion or the RAB.

We believe that, when appropriately synthesised, the modelling presents a compelling and overwhelming case for Basslink’s conversion to a regulated asset.

Reliability: a dimension of the NEO not captured in the modelling

The AER is seeking stakeholder views on the degree to which reliability and/or security of supply may be different if Basslink is converted, relative to Basslink operating as an MNSP



What we heard¹

- Consumers and industry stakeholders both strongly supported a high level of reliability due to concerns about the potential for electricity outages if Basslink fails.
- 84% of survey participants rated having greater reliability for the future as something they strongly support (rated 7+ out of 10). This was the top-rated item among all energy focus areas for the future, with survey respondents with a disability significantly more likely to be very or extremely concerned about the reliability of their electricity supply.
- Consumers at the workshops wanted to ensure that there were timely repairs to Basslink's subsea cable should a failure occur in the future. Tasmanian consumers particularly referenced the need to avoid a repeat of Basslink's 2015 outage.

Factors that will impact Basslink reliability and capacity:

- Market and commercial incentives and **revenue risk** can drive different asset management strategies and reliability outcomes than incentives under regulation.
- **Basslink capacity is constrained** if sufficient load and generator tripping is not procured for the Basslink Frequency Control System Protection Scheme. Contracting of these services may reduce where there is insufficient revenue to incentivise the acquisition of these services.

The ACIL Allen modelling **does not assess asset reliability** and consequent impacts to **system reliability** under regulated vs unregulated scenarios.

The model produces a **single set of dispatch outcomes** for each scenario, based on a common generation and transmission build-out and a "**median**" set of demand, outage and renewable resource assumptions. These assumptions are highly unlikely to result in any modelled unserved energy.

Relevant quotes:

- *"The modelling **did not identify reliability benefits** for calculating consumer benefits (no unserved energy or near misses)."*
- *"As Basslink is **assumed to remain available** under all modelled scenarios, it has been **assumed that no power system security benefits** are associated with converting Basslink."*

1. Basslink Consumer Engagement Report: September 2023

Stakeholder engagement (1)

We held several meetings with members of our Basslink RRG and other stakeholders on the ACIL Allen modelling and this document. Our stakeholders are continuing their review of the materials released by the AER as well as the concepts presented in this paper. The below provides initial feedback we have received. Our formal submission to the consultation will include further detail on subsequent feedback received.

| What we heard | How we will respond |
|--|--|
| <p>Understanding of how Basslink would operate on a regulated versus unregulated basis and a demonstration of value to customers (reliability and emissions value), including how:</p> <ul style="list-style-type: none"> the shareholder benefits on a regulated versus unregulated basis the consumer benefit changes (reduced or increased) | <p>We will assess additional benefits of regulation not captured by the ACIL Allen modelling. This will include the value Basslink provides in terms of customer reliability and security of supply. We expect that customer value will vary due to the different incentives Basslink would face in a regulated versus unregulated environment.</p> |
| <p>Request to see how the modelling would look with different/bigger range of assumptions.</p> | <p>We understand the ACIL Allen modelling is based on a single set of "median" inputs for demand, generator outages and renewable resource availability. Similarly, the modelling adopts inputs from the ISP with fixed dates for transmission build-out, generation retirement and some new generation build. We encourage the AER to consider more than one static "median" operating scenario and consider consumer benefits that may accrue from regulation in periods of drought or excess renewable resources, high or low demands, and from the possibility of delays to transmission and generation build-out.</p> |
| <p>The average of customer benefit/disbenefit is not a useful metric as it doesn't account for the likelihood of each scenario.</p> | <p>We agree that the scenarios should be weighted to account for the likelihood of each scenario. We have updated this submission to note that the AER is seeking stakeholder views on the weighting to place on various scenarios modelled. We will provide our view on these weightings in our formal submission to the consultation paper.</p> |
| <p>Whilst there is agreement ignoring the 'no Marinus' options is not helpful, adjusting the Marinus 1 and Marinus 1+2 options to account for a more likely completion date would be more useful than discounting them because of the unrealistic commencement assumption.</p> | <p>We agree that the treatment of Marinus Link options in the modelling could be improved using more realistic assumptions. Our formal submission to the consultation paper will discuss this issue in more detail. In addition to more realistic timing, consideration still needs to be given to the potential for further delays given delays being experienced by other transmission construction projects across the NEM.</p> |

Stakeholder engagement (2)

| What we heard | How we will respond |
|--|--|
| <p>Why does Basslink need to jump through “conversion hoops”, but Marinus Link does not.</p> | <p>We understand that Marinus Link can and has applied directly to be a regulated link. It doesn't need to justify whether regulated or unregulated status delivers more net benefits to consumers.</p> |
| <p>Information was sought on what the actual capacity utilised by Hydro Tasmania was, notwithstanding 100% of capacity was being contracted by them.</p> | <p>Historically, when contracted to Hydro Tasmania, Basslink's capacity has been bid into the market at \$0, and it has effectively operated as an "open link". In this sense it has been "fully utilised" by Hydro Tasmania, although flows are not at maximum capacity in either direction 100% of the time. APA notes that these historical arrangements are not the arrangements that have been modelled by ACIL Allen.</p> |
| <p>Further explanation of the distribution of inter-regional settlement residues (IRSRs) and Settlement Residue Auction proceeds in a regulated and unregulated environment was sought.</p> | <p>Under current contracted MNSP arrangements, Basslink receives payments from AEMO for IRSRs resulting from the link operating as an "open link" (that is, bid in at \$0). The IRSRs are then "on-sold" to Hydro Tasmania. In return, Hydro Tasmania pays Basslink a contract/facility fee.</p> <p>To receive the equivalent IRSR revenue if Basslink is regulated, Hydro Tasmania would need to bid for and win the rights to all SRA units on both directional interconnectors (for flows from Victoria to Tasmania and for flows from Tasmania to Victoria). Hydro Tasmania would pay AEMO the successful bid prices for these units and receive the IRSRs. AEMO then passes the successful SRA bid revenue to the Tasmanian or Victorian NSP (i.e. TasNetworks or AEMO) for redistribution to customers.</p> <p>Treatment of Settlement Residue Auction proceeds, and their inclusion in the assessment of the benefits of conversion, is an important issue which will be discussed in more detail in our formal submission to the consultation paper.</p> |
| <p>An explanation of how consumer prices may vary when accounting for costs to access inter-regional settlement residues between a regulated scenario, and a scenario where Basslink is contracted with Hydro Tasmania was sought.</p> | <p>In an unregulated contracting scenario, contractual terms, including any facility fee, would be negotiated between Basslink and Hydro Tasmania. Typically, terms would typically be set for the duration of the contract (subject to bilateral negotiations and other contractual terms). These terms would remain confidential.</p> <p>In a regulated scenario, the rights to access inter-regional settlement residues are auctioned by AEMO. AEMO publishes the aggregate amount paid for the auction rights for each quarter (subsequently returned to consumers as an offset to transmission costs), but amounts paid and rights secured by each participant are confidential.</p> |

Modelling results

ACIL Allen modelled eighteen scenarios

Three assumptions of Basslink operating mode

| | Regulated | | | Merchant | | | HT Trading | | |
|-----------------------------------|--|----------|------------|-----------|----------|------------|--|----------|------------|
| | Regulated | Merchant | HT Trading | Regulated | Merchant | HT Trading | Regulated | Merchant | HT Trading |
| | (HT contracted at 55% of gen capacity) | | | | | | (HT contracted at 60% of gen capacity) | | |
| Three Marinus Link configurations | No Marinus Link | | | | | | | | |
| | Marinus Link stage 1 | | | | | | | | |
| | Marinus Link stage 1&2 | | | | | | | | |

Two assumed contracting levels for Hydro Tasmania

All development plans use the AEMO 2024 Integrated System Plan (ISP) Step Change scenario assumptions, with minor variations in the quantity and location of wind & solar across Vic/Tas, depending on the timing and size of Marinus Link.

“With the decarbonisation of the electricity market, there is a lot of change that occurs in the market between 2025 and 2035, and particularly in the period between 2025 and 2030.

“... between 2025 and 2030:

- Coal closure: about 11,000 MW of black and brown coal exits the market*
- Wind and solar capacity: around 35,700 MW of wind and solar capacity enter the market”*

(ACIL report page 9)

Six regulated “base cases” and twelve comparator scenarios

| | Regulated | | | Merchant | | | HT Trading | | |
|------------------------|--|---|---|--|---|---|------------|---|---|
| | (HT contracted at 55% of gen capacity) | | | (HT contracted at 60% of gen capacity) | | | | | |
| No Marinus Link | • | • | • | • | • | • | • | • | • |
| Marinus Link stage 1 | • | • | • | • | • | • | • | • | • |
| Marinus Link stage 1&2 | • | • | • | • | • | • | • | • | • |

The benefits of regulation compared to the relevant counterfactual are measured across two timeframes:

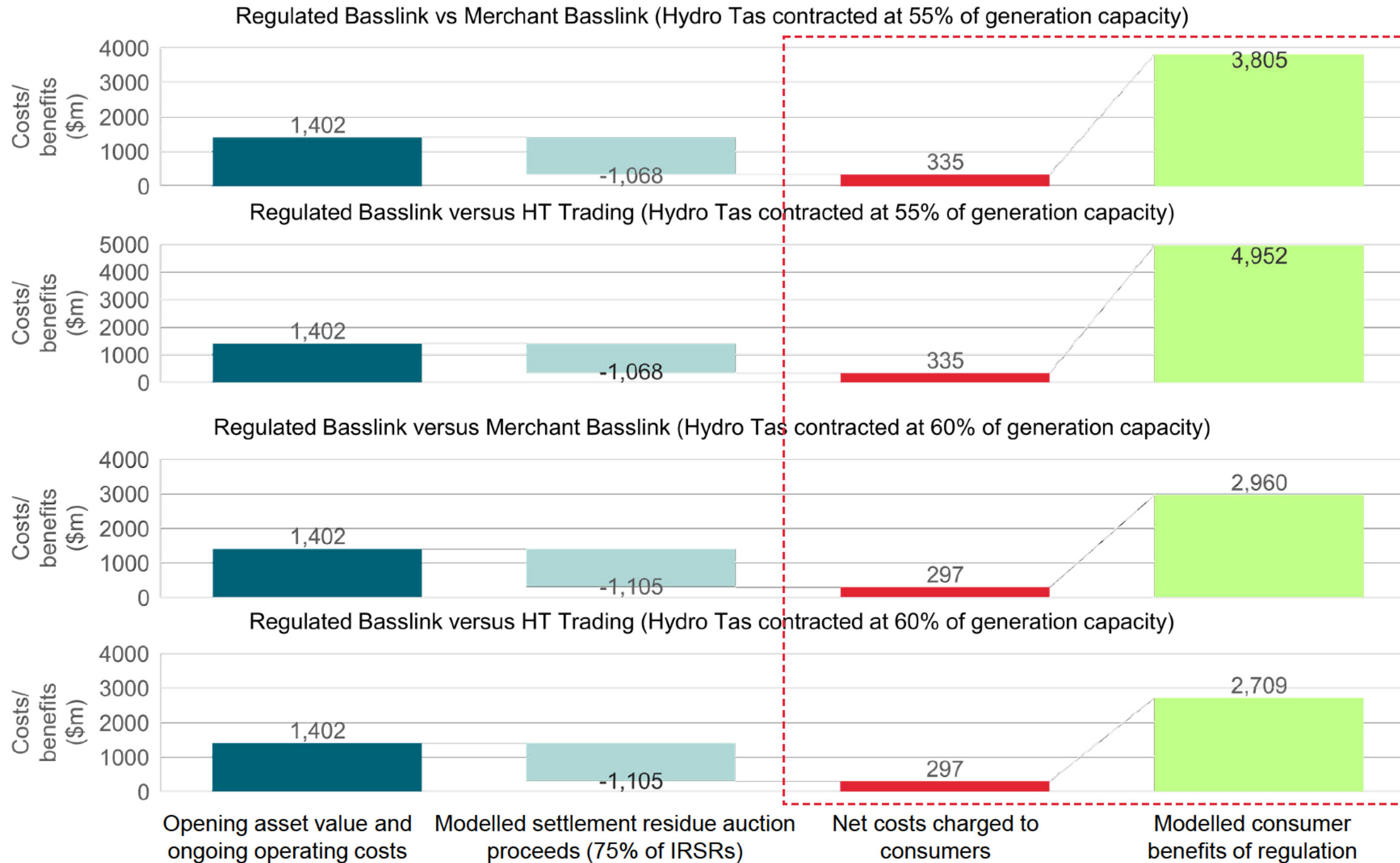
- 2025-2040
- 2025-2050

The AER consultation paper focuses on benefits over the period 2025-2050.

Categories of benefits modelled

| | Consumer benefits | Market benefits |
|---|---|--|
| Benefits which are observed to vary between regulated and counterfactual modelling | <ul style="list-style-type: none"> • Reductions in the cost of wholesale electricity (wholesale pool prices multiplied by customer demand, summed over all NEM regions) • Reductions in the cost of emissions | <ul style="list-style-type: none"> • Reductions in the cost of fuel consumed • Reductions in variable operating costs • Reductions in the cost of emissions |
| Benefits which are assumed to be or modelled as unchanging between regulated and counterfactual modelling | <ul style="list-style-type: none"> • Reliability • System security <p><i>Assumed to be the same in regulated and comparator scenario inputs</i></p> | <ul style="list-style-type: none"> • Reductions in capital invested in plant and equipment • Reductions in fixed operating costs • Option benefits where capital invested creates valuable options that would not exist in the absence of the capital invested. • Competition benefits |

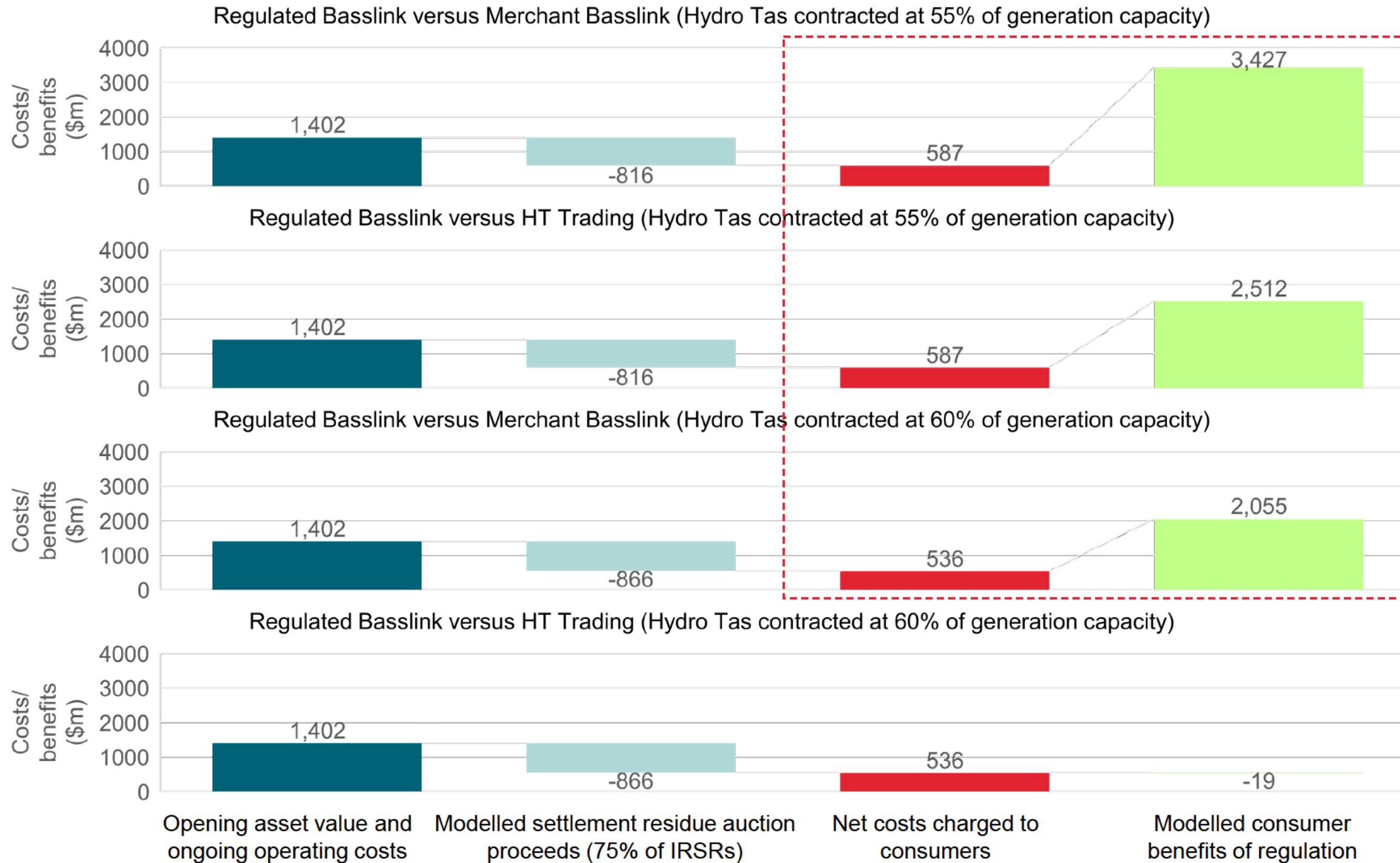
Results: Consumer benefits to 2050 (no Marinus Link)



All scenarios show consumer benefits substantially outweighing consumer costs.

| Data | Source |
|---|--|
| Opening asset value and ongoing operating costs | AER Consultation Paper Section 3.3 (\$813m RAB + \$589m operating costs) |
| Modelled settlement residue auction proceeds | AER Consultation Paper Table 4, ACIL report Figures 3.6 and 3.7 |
| Modelled consumer benefits of regulation | ACIL report Table 3.3 |

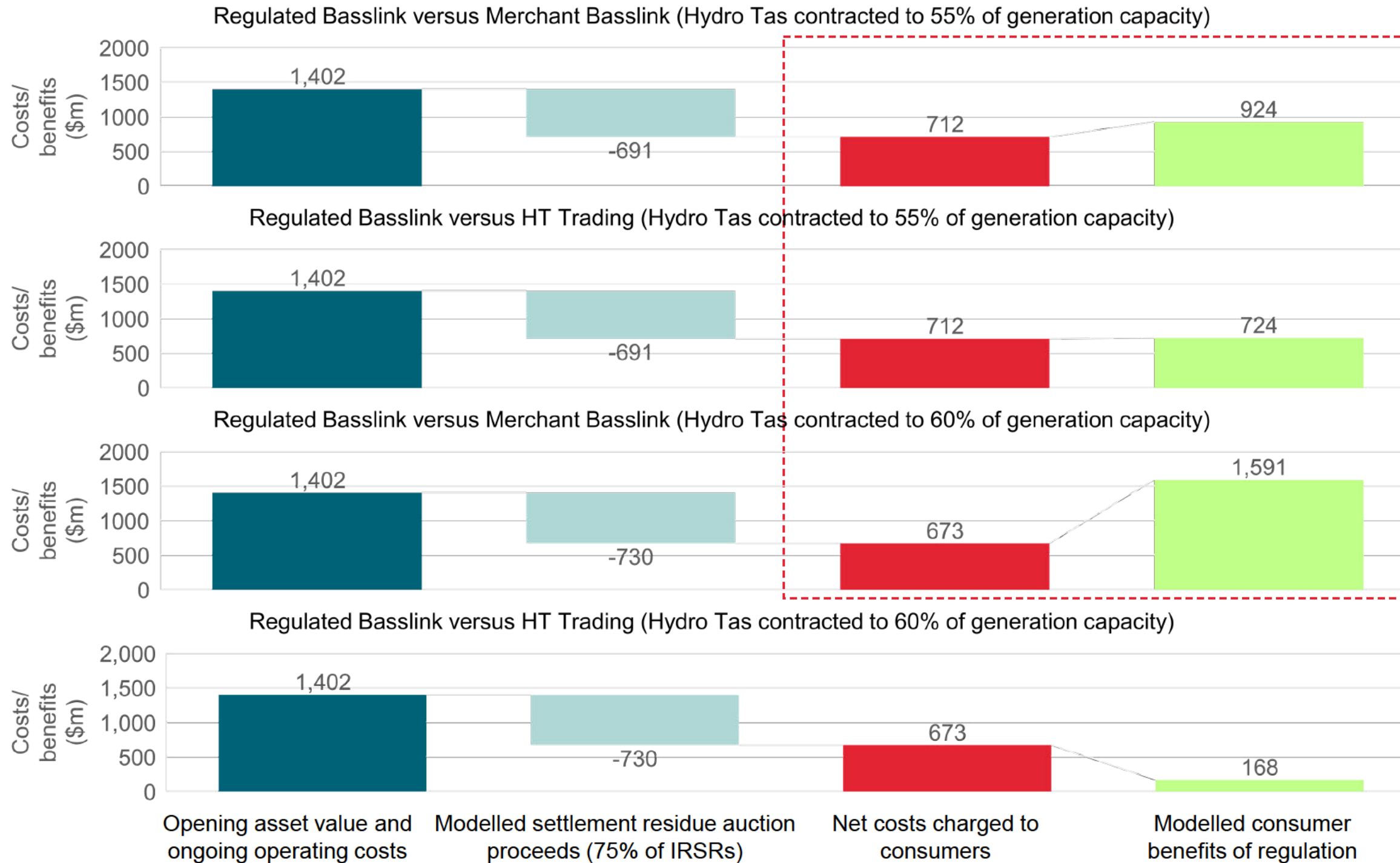
Results: Consumer benefits to 2050 (Marinus Link stage 1)



Three out of four scenarios show consumer benefits substantially outweighing consumer costs.

| Data | Source |
|---|--|
| Opening asset value and ongoing operating costs | AER Consultation Paper Section 3.3 (\$813m RAB + \$589m operating costs) |
| Modelled settlement residue auction proceeds | AER Consultation Paper Table 4, ACIL report Figures 3.6 and 3.7 |
| Modelled consumer benefits of regulation | ACIL report Table 3.3 |

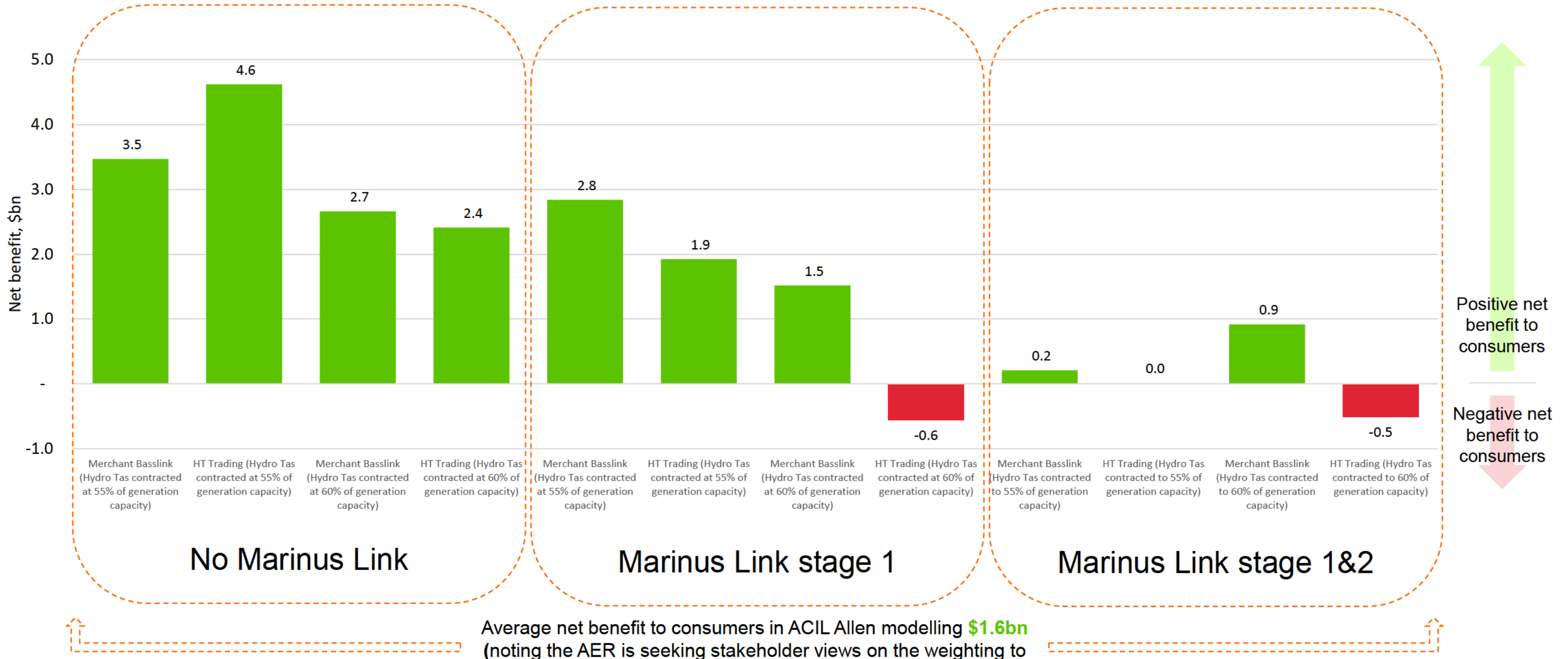
Results: Consumer benefits to 2050 (Marinus Link stages 1&2)



Three out of four scenarios show consumer benefits outweighing consumer costs.

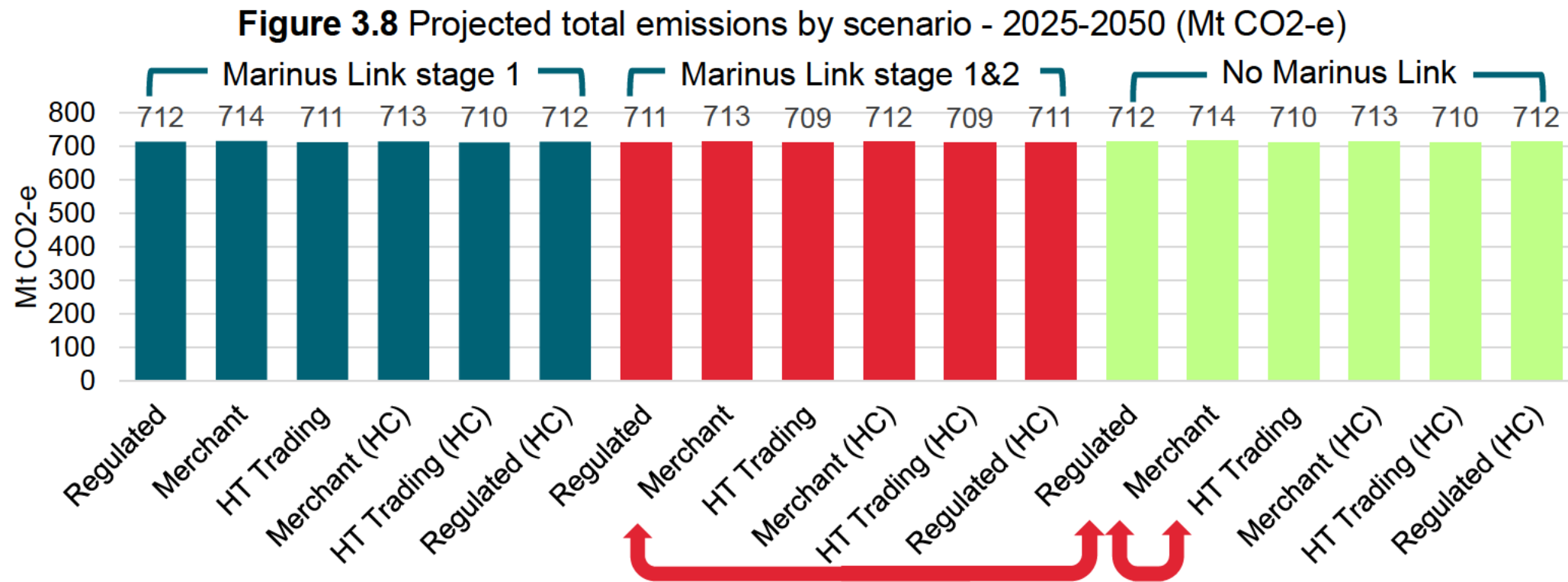
| Data | Source |
|---|--|
| Opening asset value and ongoing operating costs | AER Consultation Paper Section 3.3 (\$813m RAB + \$589m operating costs) |
| Modelled settlement residue auction proceeds | AER Consultation Paper Table 4, ACIL report Figures 3.6 and 3.7 |
| Modelled consumer benefits of regulation | ACIL report Table 3.3 |

Results: Consumer net benefits to 2050



Results: Emissions and modelled “market benefits”

For the assumed generation development plans, there is minimal change in total emissions to 2050 across the scenarios. Similarly, there are minimal changes in fuel costs given the predominantly renewable fleet modelled.



Context: 2023 NEM emissions were approximately 123 Mt CO₂

(National Greenhouse Gas Inventory Quarterly Update December 2023)

There is greater variation in emissions between regulated and merchant scenarios (2 Mt CO₂) than there is between scenarios with and without 1500 MW of Marinus Link (1 Mt CO₂).

All scenarios include the retirement of 11,000 MW of coal and new build of 35,700 MW of renewables by 2030. The resulting system is relatively low-emissions, so it is expected that the model would produce only small variations in emissions and resulting emissions costs between scenarios. It is also expected that the model would produce only small variations in fuel and operating costs between scenarios, when so much of the system is supplied by zero fuel cost renewable energy.



For further information

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