



ELECTRICITY INFRASTRUCTURE ROADMAP

# Electricity Infrastructure Fund (Part 7 of the Electricity Infrastructure Investment Act 2020)

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Policy paper



Published by NSW Department of Planning, Industry and Environment

[dpie.nsw.gov.au](http://dpie.nsw.gov.au)

Title: Electricity Infrastructure Fund (Part 7 of the Electricity Infrastructure Investment Act 2020): Policy paper

First published: September 2021

ISBN: 978-1-922715-66-1

EES2021/0458

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# Contents

<b>Shortened forms</b> .....	<b>iv</b>
<b>Executive summary</b> .....	<b>v</b>
<b>Context, policy intent and scope of this policy paper</b> .....	<b>1</b>
Context .....	1
Scope of this paper .....	3
Policy intent .....	3
<b>Guiding principles</b> .....	<b>8</b>
<b>Apportioning costs across networks</b> .....	<b>9</b>
Approach for measuring and apportioning costs .....	9
Aligning revenue with expenditure .....	10
Potential options for apportioning costs .....	10
<b>Smoothing cost recovery</b> .....	<b>15</b>
Timing and frequency of contributions to the Fund .....	16
Ensuring Scheme Financial Vehicle liquidity .....	17
Smoothing costs to ensure stability for consumers .....	18
Passing through cost savings .....	20
<b>Transparency of costs and benefits to consumers</b> .....	<b>23</b>
Depicting Roadmap costs and benefits .....	23
Communicating Roadmap scheme costs and benefits .....	25
<b>Exemptions</b> .....	<b>28</b>
Exemptions from the energy savings scheme .....	28
Exemptions for EITE entities under the CPRS and RET .....	29
Exemptions in the context of the Roadmap .....	29
Administering exemptions .....	30
Exemptions for green hydrogen production .....	32
<b>Fund administration</b> .....	<b>34</b>
Fund governance .....	34
Industry standards on financial reporting .....	34
<b>References</b> .....	<b>35</b>

## Shortened forms

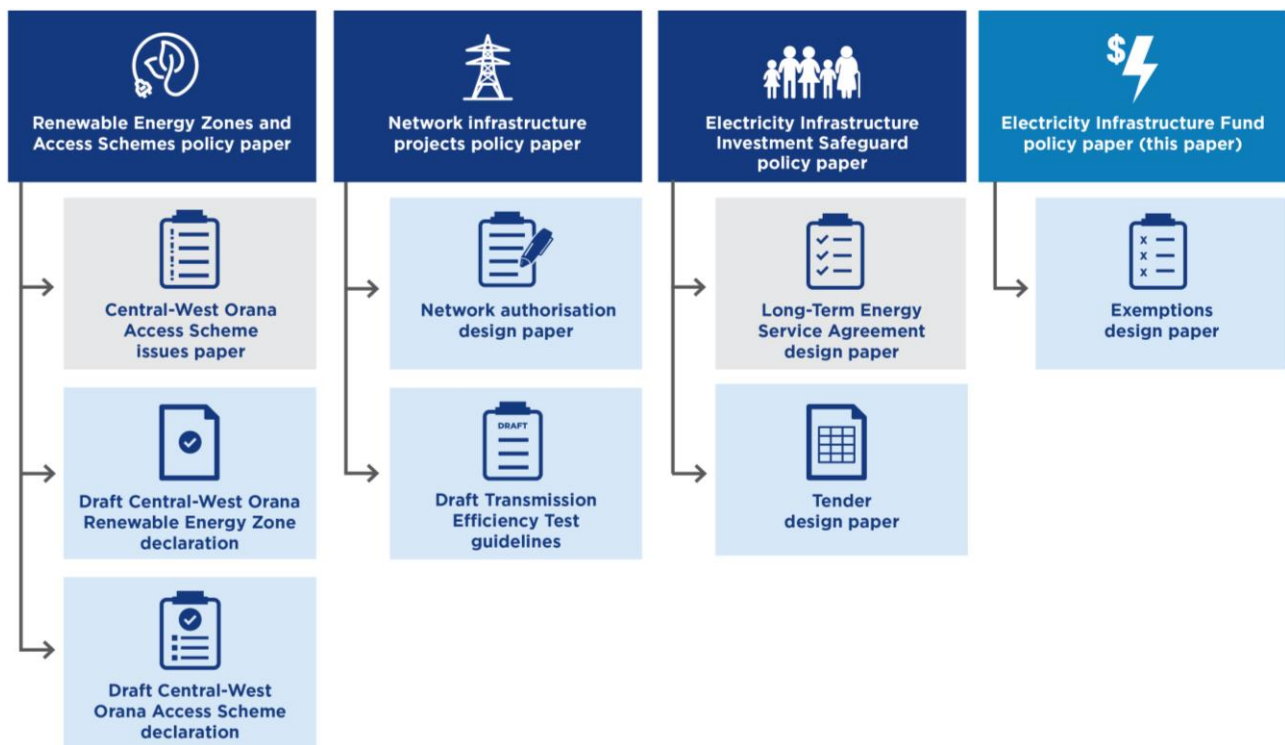
Term	Meaning
AAS	Australian Accounting Standards
ACCC	Australian Competition & Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
CCF	NSW Climate Change Fund
CER	Clean Energy Regulator
CPRS	Carbon Pollution Reduction Scheme
Department	NSW Department of Planning, Industry & Environment
DER	distributed energy resources
DUOS	distribution use of system
EII Act	<i>Electricity Infrastructure Investment Act 2020</i>
EITE	emissions intensive trade exposed
ESS	NSW Energy Savings Scheme
Fund	Electricity Infrastructure Fund
IPART	Independent Pricing and Regulatory Tribunal
JSA	jurisdictional scheme amount
LGA	Local Government Area
LTES Agreements	Long-Term Energy Service Agreements
NEL	National Electricity Law
NEM	National Electricity Market
NER	National Electricity Rules
NOUS	Network Use of System
Regulator	NSW regulator appointed under the EII Act
RET	Renewable Energy Target
REZ	Renewable Energy Zone
Roadmap	Electricity Infrastructure Roadmap
Safeguard	Electricity Infrastructure Investment Safeguard
TUOS	transmission use of system
TWAP	time-weighted average prices

# Executive summary

The Electricity Infrastructure Roadmap (the Roadmap) is the NSW Government's plan to transform our electricity sector into one that is cheap, clean and reliable. It is enabled by the *Electricity Infrastructure Investment Act 2020* (EII Act), which passed into law with strong bi-partisan support in December 2020. The Roadmap will facilitate the declaration of Renewable Energy Zones (REZs), authorise new network infrastructure, and encourage private investment in new generation, long duration storage and firming infrastructure.

The NSW Department of Planning, Industry and Environment (the Department) is developing recommendations for regulations needed under the EII Act in three tranches throughout 2021. The first tranche of regulations, specific to the Renewable Energy Sector Board, were made in March 2021. The Department consulted on tranche two, relating to urgent and mechanical policy details, in May 2021. The third tranche (to which this paper belongs) will seek feedback to inform the development of regulations under the EII Act.

**Figure 1 Policy papers with the tranche three consultation round**



To see how this paper fits within the Department's consultations on the Roadmap, see the Overview Paper.

The focus of this paper is the Electricity Infrastructure Fund (Fund) and how it will be administered by the Scheme Financial Vehicle under Part 7 of the EII Act. The purpose of the Fund is to manage costs associated with the:

- network investment required to support infrastructure projects under the Roadmap (see the policy paper on Part 5 of the EII Act for more information on how network infrastructure projects are assessed and regulated)
- establishment of Long-Term Energy Service Agreements (LTES Agreements) negotiated between large-scale renewable generation, long duration storage and firming proponents and the Consumer Trustee and entered into with the Scheme Financial Vehicle (see the policy paper on Part 6 of the EII Act for more information on how these contracts are negotiated and costs determined), and

- administration of the EII Act by the Consumer Trustee, Infrastructure Planner, the NSW regulator appointed under the EII Act (the Regulator), Financial Trustee and the Scheme Financial Vehicle.

One of the ongoing payments into the Fund will be made by the NSW distribution businesses (Ausgrid, Endeavour Energy and Essential Energy) and recovered from NSW electricity consumers. The Regulator will determine the overall contribution from each distribution business through a contribution determination. Once the allocation to customers is confirmed, distribution businesses will retain the flexibility to assign contribution allocations across customer classes under the current National Electricity Rules (NER) provisions.

The Scheme Financial Vehicle may serve a contribution order on distribution businesses where the amount specified in the Scheme Financial Vehicle's contribution order will be the amount specified in the Regulator's determination. However, distribution businesses are not intended to carry any of the financing risk of the scheme and should be no worse off due to their role in administering contributions from consumers. Rather, their role is to manage the application of the cost pass-through to consumers.

In this paper, we outline some of the issues to be addressed in the design of the cost recovery framework and pose questions about proposed responses to these issues. These include:

- principles to guide how the Regulator will set contributions
- a method for measuring and apportioning the costs that distribution businesses recover from consumers
- whether and how to smooth scheme costs across financial years, reducing any year-on-year volatility in consumer charges for the scheme
- how to communicate to consumers the costs and benefits of the Roadmap, and
- a framework to exempt certain consumers from paying costs.

These policy issues could be addressed by developing regulations that guide the decision-making of the Minister, Regulator or distribution businesses. Alternatively, these matters could be left to the discretion of entities, guided primarily by the requirements of the EII Act.

All elements of this cost recovery work will also need to consider the NER, as any cost recovery mechanism will rely on existing 'jurisdictional scheme' provisions. These provisions allow distribution businesses to directly pass through 'jurisdictional scheme amounts' to consumers as part of regulated network prices.

## Summary of questions for stakeholders

This paper includes questions for stakeholder feedback on policy issues relating to cost recovery and exemptions. The questions are collated below.

### Question related to the guiding principles

**Question 1:** Do you agree with the proposed guiding principles? Are there other principles which should be considered?

### Question related to the approach for measuring and apportioning costs

**Question 2:** Do you agree that apportioning contributions from distribution businesses based on a mixture of energy delivered and peak demand best aligns with the guiding principles? Is there a better option? Why is it better?

## Questions related to the smoothing of cost recovery and hardship provisions

**Question 3:** Do you agree contributions from distribution businesses should be paid quarterly to minimise working capital for distribution businesses? Will monthly payments become less problematic in the future?

**Question 4:** Do you agree the Scheme Financial Vehicle should use a loan facility to smooth costs over time? If not, why?

**Question 5:** Do you agree a three-year rolling average (one year lagging and two years leading) is the best way to ensure adequate funds are available while also smoothing costs for consumers?

**Question 6:** Do you agree the scheme should provide for a negative contribution amount? What threshold should be set for applying a negative amount?

## Questions related to transparency of costs and benefits to consumers

**Question 7:** Do you agree it is important for consumers to understand the component parts of Roadmap scheme costs (e.g. payments under LTES Agreements compared to network infrastructure)?

**Question 8:** How can the benefits of the Roadmap be assessed and communicated, ensuring the information is up-to-date, accepted by stakeholders, relevant for consumers and without significant administrative burden?

**Question 9:** Do you agree a mixture of annual reports, website(s) and bill information is the best way to inform consumers about the benefits and costs of the Roadmap? Is there a simple way to provide bill information?

## Questions related to exemptions

**Question 10:** Do you agree with exempting entities up-front or would you prefer a rebate approach? Why?

**Question 11:** If exemptions were administered on a proportional scale (between zero and 100%), how could we categorise which entities should be subject to which level of exemption?

**Question 12:** Do you agree green hydrogen production should be treated in the same way as other emissions intensive and trade exposed industries, or should it be treated differently?

## Question related to the Fund administration (financial reporting)

**Question 13:** Do you agree the options outlined are an effective approach for financial reporting for the Fund? Are there any additional considerations?

## Call for submissions

The Department invites submissions on the Electricity Infrastructure Fund policy paper.

Please provide your feedback as direct responses to the questions in this paper. This will help us incorporate your responses into our policy development process. You are encouraged to provide evidence to support your feedback.

**Preferred option:** You can respond to questions in the Electricity Infrastructure Fund policy paper by using the online form on the [Electricity Infrastructure Investment Regulations webpage](#).

**Alternative options:** Alternatively, you may fill in and return a submission form (Word document) available on the [Electricity Infrastructure Investment Regulations webpage](#). The Department also welcomes free form submissions, instead of, or in addition to, the submission form. Please email your submission form and/or free form submission to [Electricity.Roadmap@dpie.nsw.gov.au](mailto:Electricity.Roadmap@dpie.nsw.gov.au) with **'[Your Name] – Electricity Infrastructure Fund Policy Paper – Submission'** in the subject line.

Please identify if you would like your submission to be confidential or anonymous.

Please note that participation in providing submissions is entirely voluntary, is not assessable, and does not in any way include, exclude, advance or diminish any entity from any future procurement or competitive process in regard to Renewable Energy Zones, LTES Agreements under the NSW Electricity Infrastructure Investment Safeguard, or any other NSW programs.

The Department is committed to an open and transparent process, and all survey responses and submissions will be made publicly available, except those requested to be kept confidential. **The Department will redact personal details from submissions made by individuals to protect personal information.** If a submission author regards any content of their submission as revealing protectable corporate intellectual property, they should clearly note and define this in their submission. In the absence of an explicit declaration, the Department will assume that information provided by respondents is not considered intellectual property of the respondent.

**If you wish for your written submission to remain confidential (except to Department project staff and advisors, who are subject to appropriate confidentiality arrangements), please clearly state this in your submission, and only your organisation's name will be published.**

The Department may disclose confidential information provided by you to:

- NSW Government departments, NSW Ministers and Ministers' Offices
- the NSW Ombudsman, Audit Office of NSW or as may be otherwise required for auditing purposes or Parliamentary accountability
- the Energy Security Board, Australian Energy Market Operator, Australian Energy Market Commission, Australian Energy Regulator, Independent Pricing and Regulatory Tribunal or the Australian Competition & Consumer Commission
- TransGrid, Ausgrid, Endeavour Energy, Essential Energy, the Clean Energy Finance Corporation or the Australian Renewable Energy Agency
- the entities appointed or to be appointed Consumer Trustee, Financial Trustee, Scheme Financial Vehicle and Regulator under the EII Act
- other parties where authorised or required by law to be disclosed.

Where the Department discloses information to any of these parties, it will inform them that it is strictly confidential. The Department may publish or reference aggregated findings from the consultation process in an anonymised way that does not disclose confidential information.



# Context, policy intent and scope of this policy paper

## Context

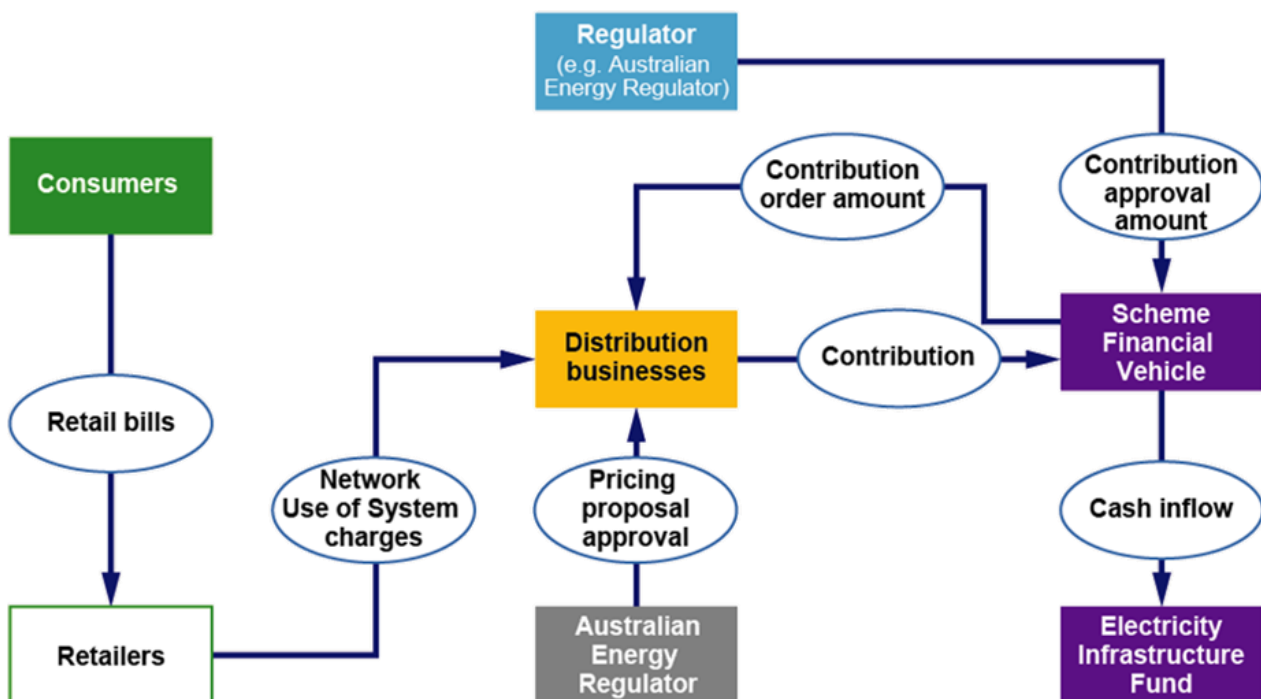
### The Roadmap at a glance

The Electricity Infrastructure Roadmap (the Roadmap) is the NSW Government's plan to transform our electricity sector into one that is cheap, clean and reliable. It is enabled by the *Electricity Infrastructure Investment Act 2020* (EII Act), which passed into law with strong cross-party support in December 2020.

The Roadmap sets out a coordinated framework to support \$32 billion of private investment in at least 12 gigawatts of renewable energy generation infrastructure and at least 2 gigawatts of long duration storage infrastructure, and supporting network infrastructure by 2030. The Roadmap will also reduce NSW electricity emissions by 90 million tonnes by 2030, helping to deliver on our ambitions to reach net zero emissions by 2050.

Figure 2 provides a contextual overview of the cost recovery process.

**Figure 2 Roadmap cost recovery overview**



### The Roadmap will deliver net benefits to consumers

The benefits from the Roadmap can be broken down into two broad categories:

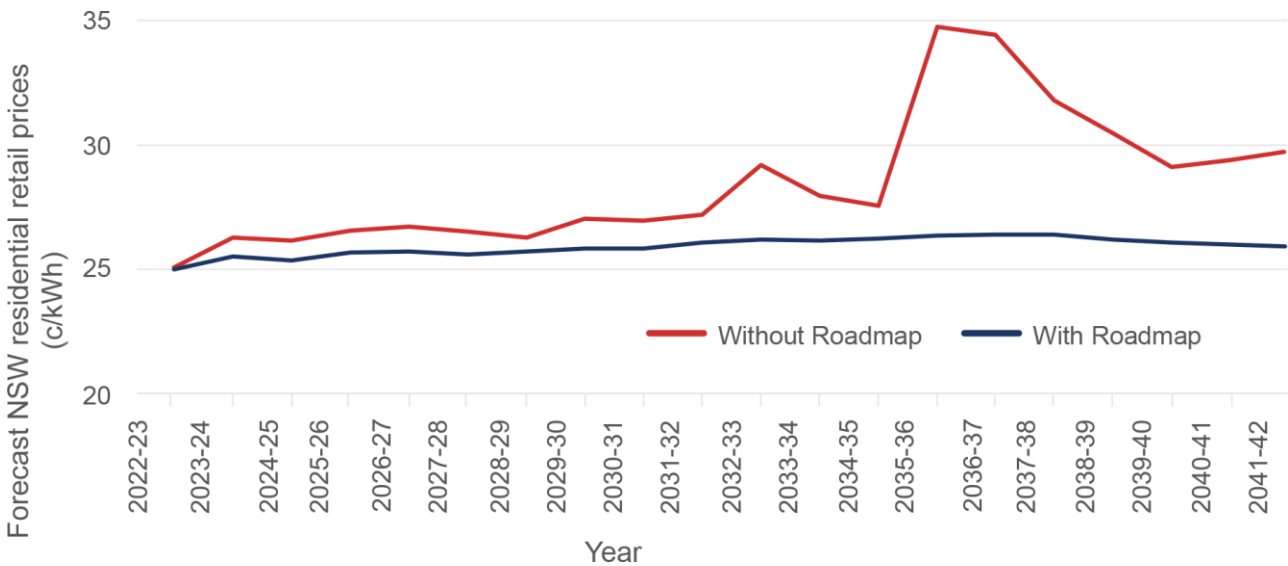
- net benefits to consumers
- broader benefits for New South Wales.

When we refer to net benefits, we subtract the costs associated with delivering the scheme that will be passed on to consumers from the overall benefits or expected savings.

Consumers will benefit directly from the Roadmap through lower wholesale prices than they would otherwise have without the Roadmap. Figure 3 compares forecast residential retail costs over the next 20 years based on two possible futures: without the Roadmap, and with the Roadmap.

The scenario without the Roadmap assumes that market participants (including generation and transmission businesses) are slow to respond to events in the National Electricity Market (NEM). They also respond reactively to price signals, rather than accurately forecasting them. For example, as power stations retire, delivery of replacement generation will be delayed until an extended period of high prices has been observed.

**Figure 3 Forecast NSW residential retail prices**

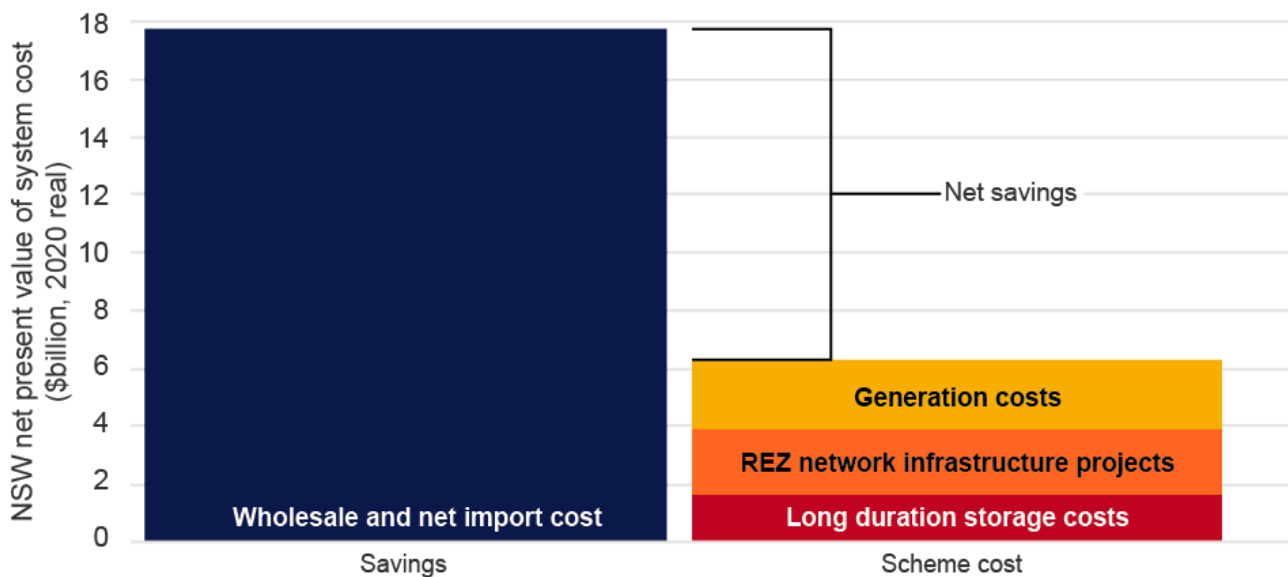


Source: DPIE (2020, Figure 20, p.56)

The Roadmap scenario delivers NSW wholesale price reductions of around 40% when compared to the scenario without the Roadmap over the forecast horizon to 2040. It does this by encouraging new, low marginal cost generation into the state’s generation supply stack, reducing new entrant capital costs, and increasing competition in the NSW wholesale electricity market. Inter-year price volatility is also dampened as scarcity pricing is forecast to reduce over time.

Figure 4 shows the net balance of the costs and benefits when comparing the scenario without the Roadmap against the scenario with the Roadmap.

**Figure 4 Net savings of the Roadmap**



Source: DPIE (2020, Figure 19, p.50)

Comparing emissions from these two scenarios, the Roadmap is forecast to deliver cumulative emissions reductions of about 210 MtCO<sub>2</sub>-e to 2040 (DPIE 2020a, p.54).

In addition to cost and emissions savings, the Roadmap is expected to result in new jobs, regional community enhancement, and additional payments to landholders hosting infrastructure, including:

- the creation of 6300 construction jobs and 2800 ongoing jobs
- up to \$265 million in community enhancement funds for host communities
- an estimated \$1.5 billion in lease payments to landholders hosting new infrastructure
- improved competitiveness of energy intensive industries based in the regions
- benefits from co-locating agriculture and renewables.

## Scope of this paper

This paper is one of many the Department is releasing to support the detailed policy design and implementation of the Roadmap framework. Figure 1 above shows papers that have been consulted on recently (shaded in the figure) or that will be released over the coming months (dotted lines in the figure).

This paper does not cover the inputs into the contribution determination, such as Long-Term Energy Service Agreements (LTES Agreements), risk management contracts, access scheme payments, network contribution order or network allowance. For further details on public consultation on these issues, please refer to the Overview Paper.

This paper seeks stakeholder feedback to help inform the development of policy options for Part 7 of the EII Act. Policy options considered here may lead to development of regulations, be included in guidelines or left to the discretion of entities responsible for the administration of the EII Act.

This policy paper is structured as follows:

- **This section** – Outlines the context, policy intent and scope of the policy paper.
- **Guiding principles** – Proposes a set of guiding principles for methods for measuring and apportioning scheme costs across consumers.
- **Apportioning costs across networks** – Outlines approaches to measure and apportion costs across distribution businesses.
- **Smoothing cost recovery** – Examines mechanisms to smooth Roadmap costs to minimise volatility and stabilise payments for customers over time
- **Transparency of costs and benefits to consumers** – Seeks feedback on how we can effectively and transparently communicate the costs and benefits of the Roadmap to consumers.
- **Exemptions** – Establishes a framework to exempt some consumers from paying scheme costs. It examines how the Roadmap may differ from other exemption schemes and discusses ways to administer an exemptions scheme, including the emerging green hydrogen industry.
- **Fund administration** – Notes existing financial reporting frameworks the Fund will be subject to.

## Policy intent

### The Electricity Infrastructure Fund

The Scheme Financial Vehicle has several functions under the EII Act. These include entering into commercial contracts as well as receiving and making payments. It will hold money in a nominated deposit account called the Electricity Infrastructure Fund (the Fund), which it will establish and maintain according to Part 7 of the EII Act.

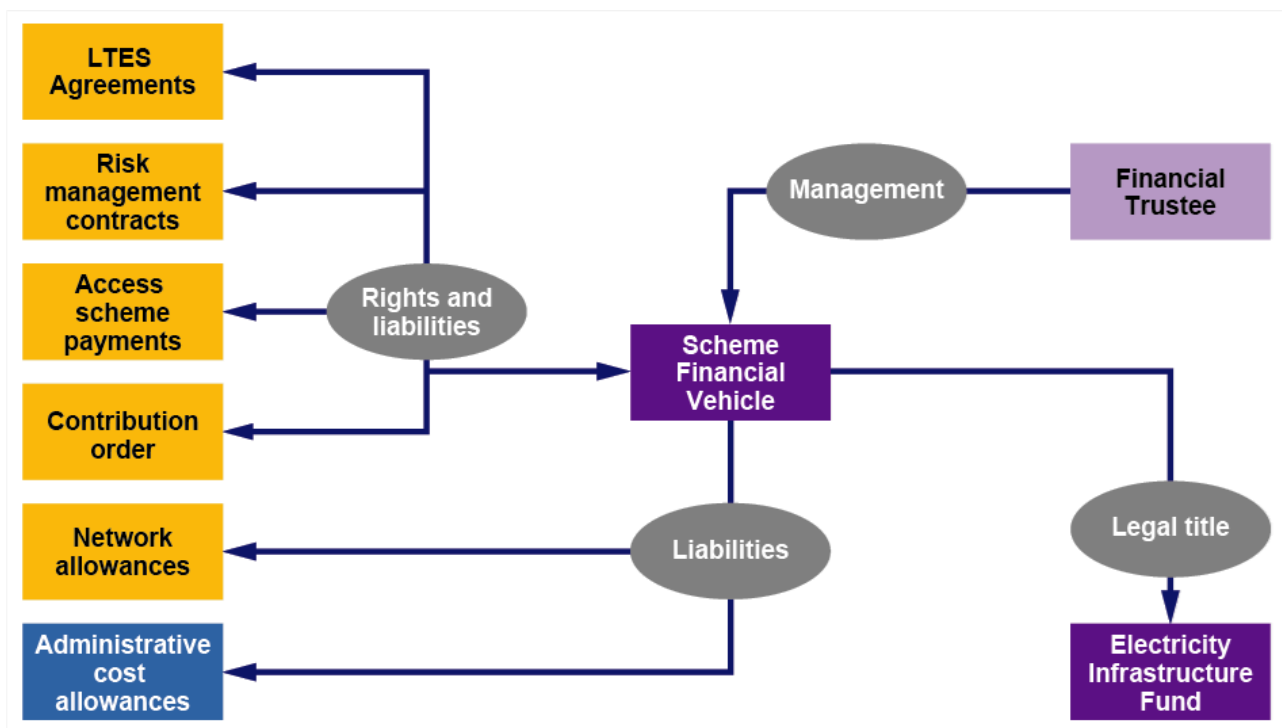
The Scheme Financial Vehicle is required to have a minimum prudent balance to ensure Roadmap liabilities are met and for this to be rated as a credit-worthy counterparty for network, generation and storage projects. To meet this function, the EII Act requires the Regulator’s annual contribution determination to include a minimum prudent balance for the Fund and the amount required to be paid by each distribution business.

Figure 5 sets out the Scheme Financial Vehicle’s rights and liabilities, including payments into and out of the Fund.

Monies payable into the Fund include:

- all money received by the Scheme Financial Vehicle from a distribution business under a contribution order
- all money advanced by the Scheme Financial Vehicle for the Fund
- all money paid into the Scheme Financial Vehicle under an LTES Agreement or a risk management contract
- all money paid into the Scheme Financial Vehicle as fees by participants in an access scheme
- the proceeds of investment of money in the Fund, and
- all money received from voluntary contributions to the Fund made by a person or body.

**Figure 5 Scheme Financial Vehicle rights and liabilities, including payments in and out of the Fund**



Monies payable out of the Fund include:

- payments under LTES Agreements
- payments under risk management contracts
- network revenue allowances
- administrative cost allowances.

While the EII Act states that the costs of the Fund will be directly recovered from distribution businesses, it is expected these costs will be passed on to consumers through the network component of retail bills.

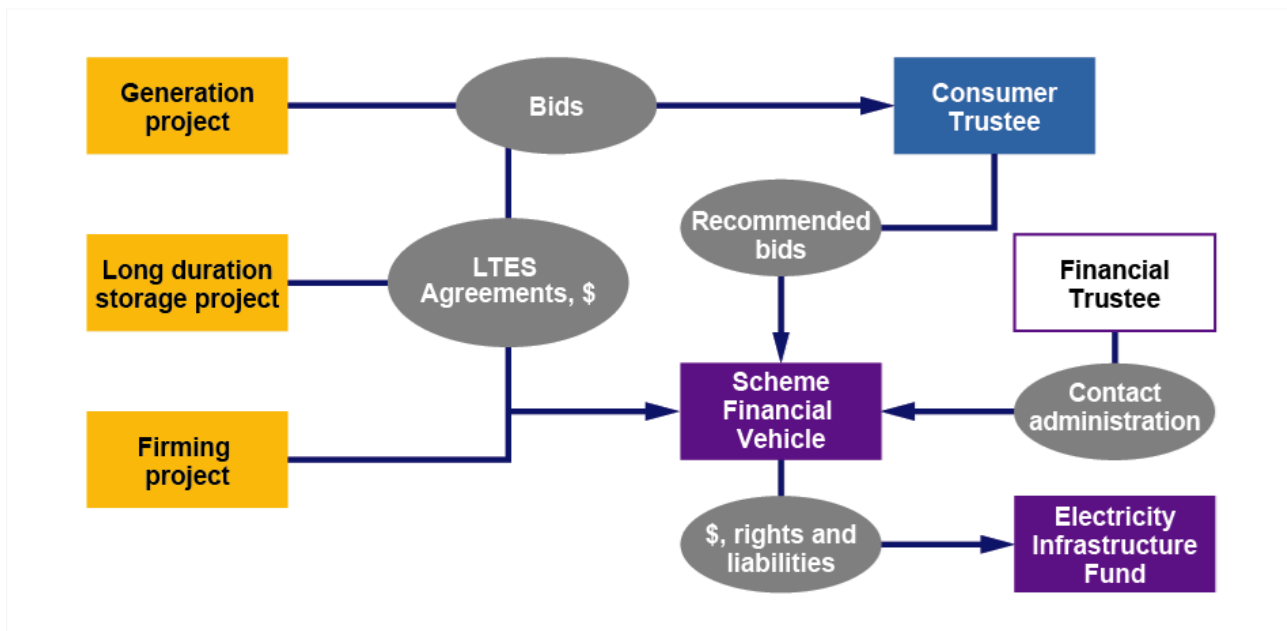
## Long-Term Energy Service Agreements

Under the Infrastructure Safeguard, a Consumer Trustee will be appointed to run competitive process rounds to offer LTES Agreements for generation, long duration storage and firming.

The Consumer Trustee will prepare development pathways for generation, long duration storage and firming to guide these competitive processes and ensure investment planning is integrated, to produce the lowest cost and highest reliability for electricity consumers.

Figure 6 illustrates the interactions between the LTES Agreement process, Scheme Financial Vehicle and the Fund.

**Figure 6 Relationship between LTES Agreements, the Scheme Financial Vehicle and the Fund**



LTES Agreements are discussed further in the *Infrastructure Safeguard policy paper (Part 6 of the Electricity Infrastructure Investment Act 2020)* and the *Long-Term Energy Service Agreement design paper* (DPIE 2021).

### Risk management contracts

Section 51 of the EII Act provides that the Consumer Trustee will prepare a risk management framework to protect the financial interests of NSW electricity customers in connection with the risks associated with LTES Agreements. The framework may provide for the functions of the Consumer Trustee, the Financial Trustee, the Scheme Financial Vehicle and the Regulator.

Section 52 of the EII Act provides that the Scheme Financial Vehicle may enter risk management contracts that are consistent with the risk management framework. A risk management contract may or may not be a derivative arrangement.

The risk management framework is a key tool the Consumer Trustee can use to manage financial risks to consumers. This could include risks associated with interactions with electricity and contract market operation, or interaction with national schemes such as the Retailer Reliability Obligation scheme. This is addressed further in the Department's *Infrastructure Safeguard policy paper (Part 6 of the Electricity Infrastructure Investment Act 2020)*.

## Network allowances

Part 5 of the EII Act sets out the role of the Regulator with respect to network infrastructure projects regulated by the EII Act. The Regulator is responsible for determining the amount payable to a network operator for network infrastructure projects and is to consider prescribed principles when determining an allowance. These include:

- a network operator is entitled to recover the prudent, efficient and reasonable costs incurred by that operator for carrying out an infrastructure project
- incentives should be given to network operators to promote economic efficiency
- a network operator is entitled to revenue for the ongoing ownership, control and operation of an infrastructure project that is commensurate with the regulatory and commercial risks.

The determination will include amounts for different expenditure components, such as:

- repayment of capital costs
- the return on capital costs that have not been repaid
- an allowance for operating costs, and
- other components as prescribed by the regulations.

In the case of capital costs, the Regulator carries out a 'Transmission Efficiency Test' to calculate the prudent, efficient and reasonable capital costs for development and construction of the network infrastructure project. These issues are discussed in further detail in the *Transparency of costs and benefits to consumers* section below, but provide useful context when thinking about the purpose and operation of the Fund.

## Scheme Financial Vehicle administrative cost allowances

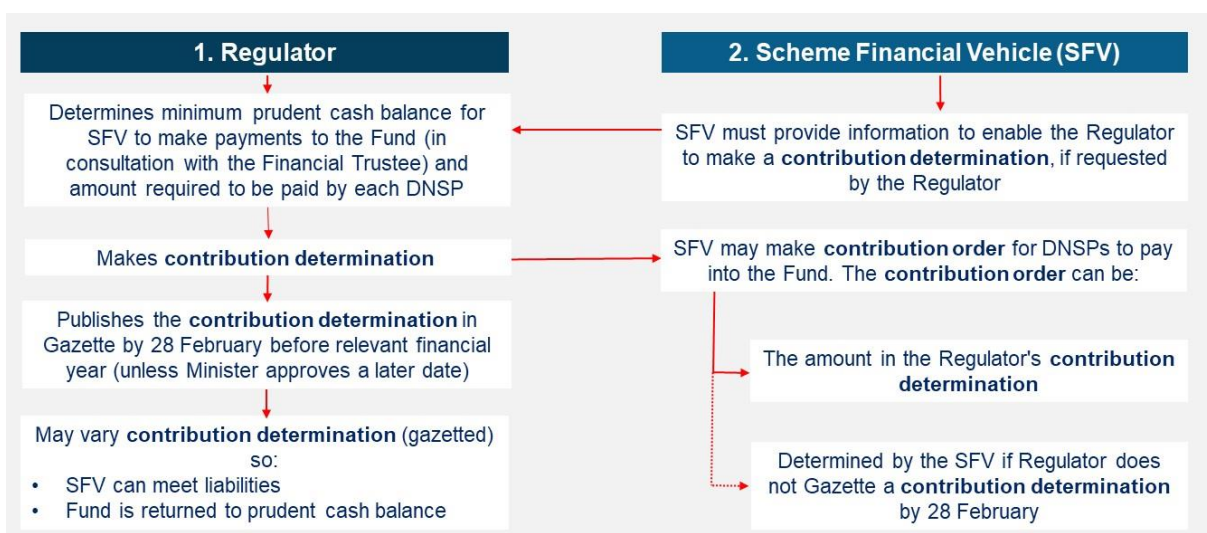
These costs include operational costs associated with the running of the Scheme Financial Vehicle and may relate to the costs of doing business such as staff costs and insurances.

The following section of the policy paper explores opportunities for the Fund to operate in a way that balances the need to deliver benefits and costs to consumers, with the need to support the development of REZs, the contractual arrangements for LTES Agreements, and to ensure the Scheme Financial Vehicle can underpin these priorities.

## Contribution determinations and orders

Each financial year, the Scheme Financial Vehicle will issue a contribution order setting out how much money is to be collected from distribution businesses. Figure 7 outlines the pathways for contribution determinations and orders.

**Figure 7 Pathways for contribution determinations and orders**



A contribution order must be the amount specified in the Regulator's contribution determination; however, if the Regulator has not finalised its determination within the specified time, the EII Act allows for the Scheme Financial Vehicle to determine the amount specified in the contribution order. Whichever path is taken, the purpose of the contribution determination and contribution order is to ensure there are enough funds for the Scheme Financial Vehicle to meet its liabilities when they fall due (the 'solvency test').

The following policy issues have been identified as priority areas to clarify and resolve through the design of the regulations or other subordinate documents and processes:

- principles to guide contribution settings
- an approach for measuring and apportioning costs for distribution businesses to recover from consumers
- how to smooth Roadmap costs across financial years, mitigating any volatility and the potential risk of price shock for consumers
- how to communicate to consumers the costs and benefits of the Roadmap, and
- a potential framework to exempt certain consumers from paying costs.

## Guiding principles

This section lists principles proposed by the Department to support the assessment of policy positions for cost recovery under the Roadmap (Part 7 of the EII Act). In considering the issues and options raised in this policy paper, one or more of these guiding principles may apply.

Under the EII Act, the Regulator is required to make contribution determinations for distribution businesses that are then used by the Scheme Financial Vehicle to make contribution orders; however, the legislation does not specify how this contribution is to be allocated across distribution businesses. Regulations can be made to provide a framework to help determine the relative contribution of each distribution business.

Table 1 outlines a series of best practice principles that have been identified to guide the development of the cost recovery framework. The Department is exploring options to embed these principles in the regulations.

**Table 1 Guiding principles for contribution settings**

Principle	Key requirements
<b>Adequate</b> Revenue adequacy and efficiency	The Scheme Financial Vehicle must ensure costs are measured and apportioned to distribution businesses so revenue is available to finance required activities and minimise the risk of distribution network bypass.
<b>Simple</b> Ease of understanding and administration	Any new processes and procedures associated with the measurement and apportionment of costs should be simple to understand, simple to implement, simple to administer and have low administration costs. Any new processes should seek to be consistent and/or complementary to existing pricing arrangements under the National Electricity Rules (NER). Any new procedures arising should not be unnecessarily burdensome, complex, redundant or duplicative for Roadmap participants.
<b>Auditable</b> Transparent, auditable and verifiable	The measurement and apportionment of costs should be transparent, auditable, and verifiable from accessible data sources. A strong audit procedure is required to ensure confidence in the cost allocation processes for distribution businesses, consumers and the Regulator.
<b>Equitable</b> Benefits accrue to all	Apportionment of costs across distribution businesses should be equitable, with costs shared among those who benefit (that is, beneficiary pays) and recognition of efforts already made by stakeholders to reduce energy demand and emissions. The principle of equitable apportionment is consistent with the benefits of the Roadmap accruing to all NSW consumers.
<b>Stable</b> Cost volatility is smoothed where possible	Smoothing mechanisms in the long-term interests of consumers should be considered to minimise working capital requirements and manage year-on-year bill volatility from net costs arising from the implementation of the Roadmap.

### Question for stakeholders

1. Do you agree with the proposed guiding principles? Are there other principles which should be considered?



## Apportioning costs across networks

This section outlines several possible approaches the Regulator could use to measure and apportion costs across distribution businesses under Part 7 of the EII Act. It provides a snapshot of the advantages and challenges associated with each option, as well as a comparison of each option against the guiding principles outlined above.

### Approach for measuring and apportioning costs

There are two distinct stages to apportioning scheme costs:

1. the Scheme Financial Vehicle apportions total scheme costs to each of the three NSW distribution businesses
2. each of the distribution businesses apportions their share of total costs across their customers.

The Department intends to recommend the Minister prescribes an approach to apportioning costs to the distribution businesses in regulations. The regulation will specify the principles for how the Regulator is to apportion scheme costs to each of the distribution businesses when making its contribution determination.

Distribution businesses allocate their costs across their customer classes as part of the national regulated network pricing process. The current NER provisions provide a mechanism for considering customer equity in allocating the contribution order between customer classes. In particular, rule 6.18.5(h) of the NER requires distribution businesses to consider the impact on retail customers of changes in tariffs from the previous regulatory year.

The Department intends to recommend the Minister does not prescribe how distribution businesses apportion their share of scheme costs to customers. Distribution businesses would retain discretion to apportion their share of scheme costs across their customers as approved by the Australian Energy Regulator (AER).

Nonetheless, the principles outlined in the previous section could be used by distribution businesses as a guide when considering the approach to take when passing Roadmap costs on to consumers.

The remainder of this section considers the issues and options for how the Regulator will determine the relative share of overall contributions required from each distribution business to the Scheme Financial Vehicle.

#### Box 1 – NSW Climate Change Fund

The NSW Climate Change Fund (CCF) is an existing jurisdictional scheme. The CCF's processes are an example of how the Fund could operate, noting that the level of costs under the Roadmap may be higher and more variable across years. It provides revenue for a broad suite of programs that meet legislative purposes, in this case to address climate change. It is funded by contributions from the three NSW distribution businesses, who in turn pass on the cost of these contributions to electricity customers through network charges.

Once gazetted by the NSW Government, CCF contribution amounts are accounted for as 'jurisdictional scheme amounts' as regulated under the NER.

This revenue is passed through to different customer classes outlined in each distribution business's annual pricing proposal and published as a price item in a distribution business's network price list, alongside distribution use of system (DUOS) and transmission use of system (TUOS) charges.

The CCF uses a population metric to determine cost pass-through to distribution businesses; that is, each individual contributes the same amount. However, there are several limitations in using population as the basis for determining individual distributor contributions, including:

- following council amalgamations, the boundaries of local government areas (LGAs) do not correlate to the geographical boundaries of the distributors, requiring manual updates each year, which are administratively complex and lengthy
- the population approach does not reflect consumer electricity consumption.

## Aligning revenue with expenditure

Section 58 of the EII Act provides for the Scheme Financial Vehicle to require distribution businesses to pay a specified amount into the Fund. The contribution order is designed to ensure the Scheme Financial Vehicle can meet its future liabilities. One of the principles proposed is that revenues should reflect actual efficient costs (i.e. be cost reflective).

In practice, this implies maximising the efficient use of funds to achieve scheme objectives at minimal cost to consumers. When determining the appropriate apportionment method, consideration will be given to ensuring revenues are aligned with scheme expenditure, which the Scheme Financial Vehicle is liable to pay. Scheme expenditure includes, among other things:

- payments to network operators in respect of network infrastructure projects – a REZ network infrastructure project or a priority network infrastructure project
- payments under LTES Agreements
- payments under risk management contracts, and
- payments to administrative bodies (Consumer Trustee, Financial Trustee and Regulator).

The network infrastructure projects provide additional transfer capacity to the network. Under the EII Act, the Regulator determines the amount payable to a network operator. The annual amounts will be largely predetermined although there may be incentive schemes to encourage the network operator to meet performance requirements. These incentive schemes may vary the network allowance amounts each year.

LTES Agreements will be option contracts for generation, long duration storage and firming that involve a derivative arrangement. The costs incurred by the Scheme Financial Vehicle LTES Agreements will vary depending on whether the options are exercised, and will also vary depending on the revenues each project receives from the wholesale electricity market.

Some risk management contracts are expected to be entered into on terms that are comparable to the LTES Agreements, with different prices and terms, and so may also vary year-to-year.

The payments to administrative bodies are likely to be fixed on an annual basis and be relatively small compared to the other payments. These costs could be recovered as an overhead on the other costs.

## Potential options for apportioning costs

A range of options have been identified for apportioning scheme costs to each distribution business. Table 2 provides a description of each option and the advantages and challenges of using each as the apportionment approach.

**Table 2 Cost measurement and apportionment options including advantages and challenges of each**

Option	Advantages	Challenges
<p><b>1. Population</b> Cost pass-through measured on a population basis across LGAs linked to distribution businesses</p>	<ul style="list-style-type: none"> <li>• Draws on precedent from the CCF</li> <li>• Familiar to energy network businesses</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to administer due to changes in LGA council boundaries</li> <li>• Does not reflect an individual's use of the network or associated costs, therefore does not satisfy the 'adequate' design principle</li> <li>• Difficult to account for customer hardship without measuring energy consumption</li> </ul>
<p><b>2. Customers</b> Cost pass-through based on distribution business's number of electricity customers</p>	<ul style="list-style-type: none"> <li>• Simple to administer as distribution businesses report publicly on customer numbers</li> </ul>	<ul style="list-style-type: none"> <li>• Does not reflect a customer's use of the network or associated costs, therefore does not satisfy the 'adequate' design principle</li> </ul>
<p><b>3. Transmission charges (demand)</b> Cost pass-through based on TUOS (measure of demand on transmission network use)</p>	<ul style="list-style-type: none"> <li>• Simple to administer as distribution businesses report on TUOS charges paid</li> <li>• Alignment with existing NER transmission infrastructure cost recovery processes (rule 6A.23.3(a) of the NER covers allocating TUOS between locational and non-locational components)</li> </ul>	<ul style="list-style-type: none"> <li>• Where REZ transmission costs are recovered via the NER, TransGrid's modified cost reflective network pricing method apportions more than 50% of transmission costs to a locational pricing component paid by the local distribution business. This risks a permanent redistribution of network costs towards areas with lower customer density, raising equity concerns</li> <li>• Would require adjustment to current TransGrid pricing arrangements to reduce locational impact</li> <li>• The locational allocation of TUOS is not cost reflective of Roadmap costs</li> </ul>
<p><b>4. Energy delivered to the network (volumetric)</b> Cost pass-through measured on energy delivered to the electricity distribution area (volumetric charge)</p>	<ul style="list-style-type: none"> <li>• Precedent – volume-based charges have traditionally been applied by network service providers when recovering other Government charges / schemes</li> <li>• Reflects energy delivered to distribution businesses and thus better reflects the intensity of usage of each network</li> </ul>	<ul style="list-style-type: none"> <li>• The number of consumers with embedded generation reduces the portion of volume consumed, meaning costs are subsidised by other network users (distribution businesses and retailers cannot readily access consumption data)</li> <li>• Recent trends in charging arrangements within the NEM are moving away from volumetric charges towards alternative pricing approaches</li> <li>• May not reflect the full costs associated with network investment</li> <li>• Distribution businesses with a low proportion of distributed energy resources (DER) subsidise those with a high proportion</li> </ul>

Option	Advantages	Challenges
<p><b>5. Total energy consumption including behind the meter energy sources (volumetric)</b></p> <p>Cost pass-through measured on total energy consumed by electricity customers within a distribution area (volumetric charge)</p>	<ul style="list-style-type: none"> <li>• Reflects energy consumed by customers and thus better reflects the intensity of usage by customers of each network</li> <li>• Ensures consumers with embedded generation pay their fair share</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to administer as energy consumed behind the meter is not measured</li> <li>• Recent trends in charging arrangements within the NEM are moving away from volumetric charges towards alternative pricing approaches</li> <li>• Does not reflect the costs associated with network investment</li> <li>• Distribution businesses with a high proportion of DER subsidise those with a low proportion</li> </ul>
<p><b>6. Peak demand</b></p> <p>Cost pass-through measured on a peak demand basis measured at zone substations</p>	<ul style="list-style-type: none"> <li>• More cost reflective when compared to volumetric charges of the costs associated with network investments</li> <li>• Avoids distortions in the allocation arising from the uptake of DER and embedded generation within distribution networks</li> <li>• Reflects energy delivered to distribution businesses and thus better reflects the intensity of usage of each network</li> <li>• Aligns with the Energy Security Target to drive a firming pathway to meet peak demand</li> </ul>	<ul style="list-style-type: none"> <li>• Roadmap focuses on generation capacity (12 gigawatts of generation and 2 gigawatts of long-term storage)</li> <li>• Consumers who are unable to shift their energy usage, through use of solar/smart meter/battery or other DER source, may end up paying more than those with the time or financial resources to shift</li> <li>• Limited digital metering for small users/individuals means distribution businesses need to use energy consumption as a proxy for passing through costs to consumers</li> </ul>
<p><b>7. Energy delivered to network (volumetric) and peak demand</b></p> <p>Cost pass-through measured on peak demand at zone substations, and energy delivered to each distribution area</p>	<ul style="list-style-type: none"> <li>• Reflects the costs associated with the Roadmap and is therefore an efficient allocation</li> <li>• Simple to administer the allocation of costs to the distribution businesses as energy and demand are publicly reported</li> </ul>	<ul style="list-style-type: none"> <li>• Limited digital metering for small users/individuals means distribution businesses need to use energy consumption as a proxy for passing through demand-related costs to consumers</li> </ul>

Table 3 assesses the seven identified options against four of the five principles proposed in the *Guiding principles* section. The options are not assessed against the ‘stable’ principle of minimising volatility as this will not vary by option.

This assessment provides a simple, indicative analysis of measurement options against the identified principles to support cost recovery. It provides high level guidance that could be used by distribution businesses to implement cost recovery for the Roadmap, subject to feedback on the principles and how they have been assessed.

Based on the assessment in Table 3, Option 7 – apportioning contributions from distribution businesses based on a mixture of energy delivered and peak demand – appears to best align with the principles.

Table 3 Comparison of guiding principles and apportionment options

Option	Adequate	Simple	Auditable	Equitable
<b>1. Population</b>	✗ Does not reflect costs	✗ Consistent with CCF but difficult to administer due to changing council boundaries	✓ Publicly reported every five years as part of the Census	✗ Does not reflect principle that beneficiary pays
<b>2. Customers</b>	✗ Does not reflect costs	✓ Simple to administer	✓ Publicly reported in annual Regulatory Information Notices	✗ Does not reflect principle that beneficiary pays
<b>3. Transmission charges (demand)</b>	— Reflects volumetric component of costs	✓ Simple to administer	✓ Publicly reported in annual Regulatory Information Notices	✗ Rural customers pay relatively more than urban customers
<b>4. Energy delivered to the network area (volumetric)</b>	— Reflects volumetric component of costs	✓ Simple to administer if energy consumed is from the network only	✓ Publicly reported in annual Regulatory Information Notices	— Distribution businesses with higher peak demand relative to consumption have lower costs than those with a lower proportion
<b>5. Total energy consumption including behind the meter energy sources (volumetric)</b>	✗ Based on energy generated behind the meter for which no benefit is derived from Roadmap	✗ Energy generated behind the meter not measured	✗ Energy generated behind the meter not measured	— Distribution businesses with higher peak demand relative to consumption have lower costs than those with a lower proportion
<b>6. Peak demand</b>	✓ Reflects capacity component of costs	— Simple to administer payments but an estimate of usage would be required for customers who do not have digital metering	✓ Publicly reported on an annual basis in Regulatory Information Notices	— Partial alignment of scheme costs with the beneficiaries of the energy and capacity services supported by the Roadmap
<b>7. Energy delivered to network area (volumetric) and peak demand</b>	✓ If weighted by cost incurred, reflective of costs	— Simple to administer payments but an estimate of usage would be required for customers who do not have digital metering	✓ Publicly reported on an annual basis in Regulatory Information Notices	✓ Makes it possible to align scheme costs with the beneficiaries of the energy and capacity services supported by the Roadmap

### Question for stakeholders

2. Do you agree that apportioning contributions from distribution businesses based on a mixture of energy delivered and peak demand best aligns with the principles? Is there a better option? Why is it better?

## Smoothing cost recovery

Each year the Regulator makes a contribution determination, which is used by the Scheme Financial Vehicle to make a contribution order requiring distribution businesses to pay a specified amount into the Fund.<sup>1</sup>

It is not intended that distribution businesses are the ultimate financing vehicle of the Fund and they are not expected to be worse off due to their role in relation to the Fund. Rather, their role is to manage the application of cost pass-through to consumers in line with the approach in Box 2, as a jurisdictional scheme. They could do this by applying cost pass-through to retailers, and by extension, consumers.

### Box 2 – Jurisdictional scheme amounts

The Roadmap is intended to be declared as a ‘jurisdictional scheme’ in accordance with clause 6.18.7A under the NER, consistent with other jurisdictional schemes such as the NSW CCF.

Jurisdictional schemes impose obligations on a distribution business to pass on costs incurred under a jurisdictional obligation to its customers. Distribution businesses are required to recover these costs through ‘jurisdictional scheme amounts’ (JSAs), which must be included in annual pricing proposals. Each year costs are forecast for the new financial year and then trued up two years later when actual costs are known. This process includes identifying any adjustments to tariffs resulting from over or under recovery and are reported to the AER. This method ensures that jurisdictional scheme costs are transparent and recovered on time.

A distribution business is expected to achieve a closing balance as close to zero as practicable (avoiding any substantial or systemic over or under recovery) in the jurisdictional scheme amount ‘unders and overs’ account for each forecast year in its annual pricing proposals over the regulatory control period.

The contribution order can reflect either:

- the amount set by the Regulator in a contribution determination gazetted by 28 February before the relevant financial year (unless the Minister approves a later date), or
- an amount ordered by the Scheme Financial Vehicle if the Regulator has not made the contribution determination on time (and the Minister hasn’t granted an extension of time).

The EII Act requires that the amount determined by the Regulator for a contribution determination include:

- a minimum prudent cash balance for the Fund, and
- the amount required to be paid by each distribution business.

This section discusses elements of the policy that underpin how contribution determinations and orders are developed and implemented, including:

- the timing and frequency of contribution payments made by distribution businesses to the Scheme Financial Vehicle
- how to ensure the liquidity of the Scheme Financial Vehicle, to minimise the risk of inefficient recovery of contributions from distribution businesses and therefore consumers
- basing contribution determinations on future costs, given most cost inputs would be known

<sup>1</sup> See Figure 7 – Pathways for contribution determinations and orders.

- how to smooth out the peakier and step change contribution determination costs inputs (such as the LTES Agreement and network infrastructure project costs) across multiple contribution determination periods to ensure pass-through cost stability for consumers, while also reflecting the natural hedge consumers have to LTES Agreement payments through their energy bills, and
- passing through cost savings to consumers (via a negative contribution order) so consumers benefit from the savings in the year they occur.

The purpose of considering these elements is to ensure an outcome where only the efficient amount of capital is recovered from distribution businesses (and by extension, consumers) and it is recovered in a way that is easy for distribution businesses, retailers and consumers to manage.

## Timing and frequency of contributions to the Fund

The timing and frequency of payments from distribution businesses to the Scheme Financial Vehicle needs to ensure the Fund has a prudent cash balance to meet the Scheme Financial Vehicle's liabilities. This section looks at how a 'prudent cash balance' can be achieved while minimising finance and cost risks for distribution businesses and consumers.

If contribution orders are set too frequently, or conversely, too far apart, the Scheme Financial Vehicle could accumulate a significant amount of working capital. The benefit of this is that the Scheme Financial Vehicle could pay its liabilities when they fall due and could confidently manage future costs when they arise.

However, recovering more working capital than is prudent has opportunity costs for both the Scheme Financial Vehicle and distribution businesses. These opportunity costs will ultimately be paid by consumers over time. Therefore, minimising the amount of working capital accumulated and recovered is an important objective for the timing and frequency of contribution payments.

Table 4 outlines three potential implementation options and issues to be considered in developing this element of the policy.

**Table 4 Potential options for frequency of payments from distribution businesses to the Scheme Financial Vehicle**

Potential option	Considerations
Option 1: Monthly payments	<ul style="list-style-type: none"> <li>• Aligns with the payment frequency of retailers to distribution businesses</li> <li>• Limits Scheme Financial Vehicle liquidity issues (increased frequency)</li> <li>• High number of administrative interactions between the Scheme Financial Vehicle and distribution businesses</li> <li>• Allocating annual costs across 12 payments will ensure consumers have the lowest periodic cost (compared to other payment frequencies) and carry the least credit risk</li> </ul>
Option 2: Quarterly payments	<ul style="list-style-type: none"> <li>• Consistent with the CCF and could link to payments schedules under LTES Agreements</li> <li>• Limits the Scheme Financial Vehicle liquidity issues relative to annual payments, but increases liquidity issues relative to monthly payments</li> <li>• Higher number of administrative interactions between the Scheme Financial Vehicle and distribution businesses than annual payments, but lower than monthly payments</li> <li>• Allocating annual costs across 4 payments will mean consumers will pay a higher periodic cost (compared to monthly payments) and carry a quarter of the credit risk</li> </ul>
Option 3: Annual payments	<ul style="list-style-type: none"> <li>• May create Scheme Financial Vehicle liquidity issues</li> <li>• Minimal administrative interactions between the Scheme Financial Vehicle and distribution businesses</li> <li>• Allocating annual costs in a single payment will mean consumers will pay the highest periodic cost (compared to other payment frequencies) and carry the full credit risk</li> </ul>



Options 1 and 2 consider aligning the timing of contribution payments from distribution businesses to the Scheme Financial Vehicle with existing billing cycles, which are generally either monthly or quarterly. The options considered reflect the frequency of bills issued from distribution businesses to retailers (option 1), and from retailers to consumers (option 2), noting that some market retail contracts could stipulate more frequent billing.

Aligning the timing and frequency of contribution payments with existing billing cycles would be administratively simple. It would also minimise the need for greater working capital compared to if contribution payments were required more frequently.

In practice, this would also mean there is no disruption to existing billing practices. Retailers would continue to pay their monthly NUOS bills to distribution businesses (including the scheme costs; see Box 2 above for more information on the classification of scheme costs under the NER) distribution businesses, and consumers would continue to pay their retailers according to their retail contract.

Further, under option 2, quarterly payments from distribution businesses to the Scheme Financial Vehicle could be paid in arrears. This would address billing cycle issues experienced by the CCF. Under the CCF structure, payments are due on the first day of the middle month in each quarter (for example, payment for the January to March quarter is due 1 February), giving distribution businesses less time to recover costs from consumers before they need to pay the CCF.

Table 5 summarises the Department's assessment of payment frequency against the proposed guiding principles. Based on this assessment, quarterly payments appear to be the best option.

**Table 5 Comparison of guiding principles with payment frequency, smoothing and consumer crediting options**

Option	Adequate	Simple	Auditable	Equitable	Stable
Option 1: Monthly	✓	✗	✓	✓	—
Option 2: Quarterly	✓	✓	✓	✓	—
Option 3: Annual	✓	✓	✓	✗	—

## Ensuring Scheme Financial Vehicle liquidity

If contribution payments by the distribution businesses are made quarterly (as proposed above) the expectation is that the cash balance of the Fund will remain at a sufficient level. This would allow the Scheme Financial Vehicle to meet its liabilities as they fall due during the 12-month contribution order period.

However, there is a risk that in some periods there may not be enough in the Fund to cover all costs. Given this is a low-risk possibility (as most cost inputs will be known or foreseeable) it would not be appropriate to 'self-insure' against this risk by setting contribution orders at a higher than prudent level. Doing this would shift the financing risk to distribution businesses and consumers.

To mitigate this risk, it is proposed the Scheme Financial Vehicle has access to a loan facility and true up mechanism. This facility would ensure liquidity of the Scheme Financial Vehicle is maintained and avoid the need for the Regulator to vary its contribution determination.

Governance principles and liability thresholds should be established to guide the Scheme Financial Vehicle on when to access a loan facility, with loan terms and interest rates having regard to consumers' best interests.

## Smoothing costs to ensure stability for consumers

Cost inputs to contribution determinations will largely be known or foreseeable. Depending on the type of cost input, some of these costs could appear peakier and occur for a short time at multiple intervals throughout the contribution determination period (such as LTES Agreement payments). Some other cost inputs, however, could be step changes (such as network infrastructure project costs).

Setting contribution determinations based on the actual costs within one contribution period could risk creating pricing volatility for consumers. Price stability, rather than volatility, makes it easier for consumers to budget and meet energy costs. The ability of consumers to budget appropriately has flow-on social and health impacts, and can impact other market participants, such as retailers who could face increased bad-debt risk from overly volatile changes in retail costs.<sup>2</sup>

Table 6 considers the characteristics of different scheme costs and the risk of volatility.

**Table 6 Scheme cost characteristics**

Payments linked to LTES Agreements	Network infrastructure	Administrative payments
<ul style="list-style-type: none"> <li>• Uncertain magnitude</li> <li>• Volatile due to link with wholesale electricity prices and LTES Agreement optionality</li> <li>• Natural hedge for consumers through the energy component of their bill</li> </ul>	<ul style="list-style-type: none"> <li>• Large magnitude, increasing over time as new REZs developed</li> <li>• Predictable since costs determined by Regulator through the Transmission Efficiency Test, with the potential for the Regulator to re-issue cost determinations</li> </ul>	<ul style="list-style-type: none"> <li>• Relatively small in magnitude</li> <li>• Predictable</li> <li>• Low volatility</li> </ul>

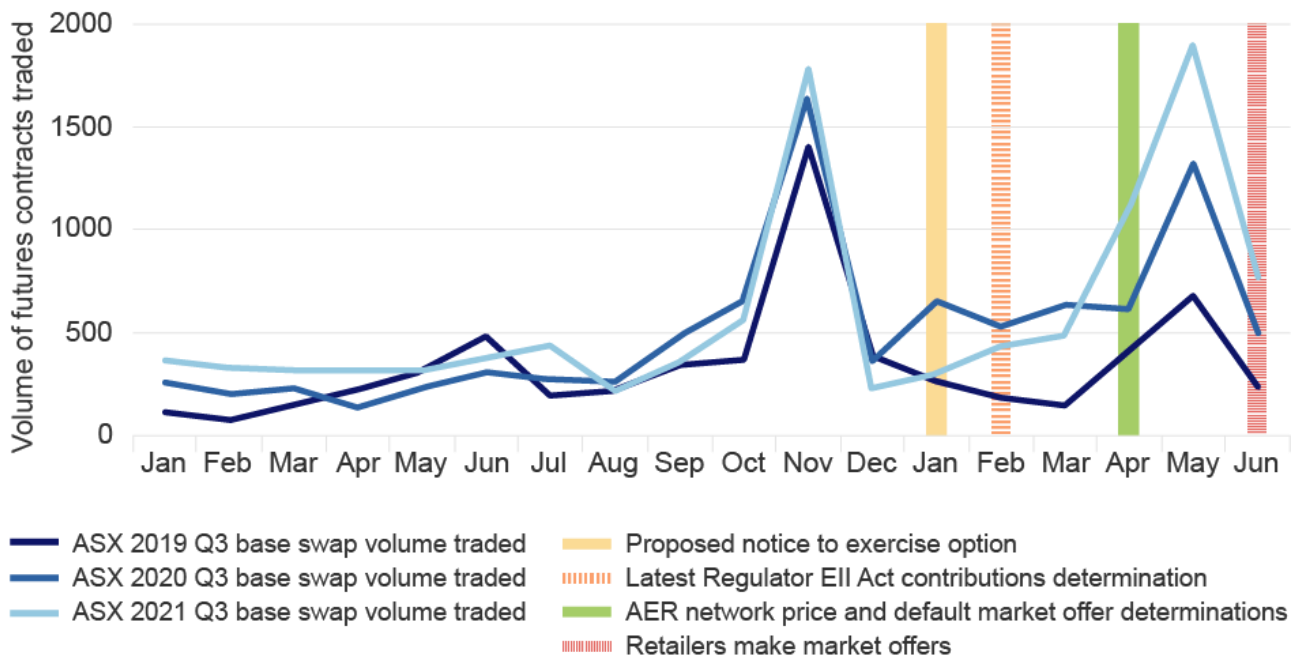
Figure 8 shows the proposed timeline of LTES Agreement notice periods alongside the contribution process. It shows that the contribution determination occurs after the LTES Agreement notice date for the following financial year, and after there is typically a significant amount of trading in electricity contracts on the Australian Securities Exchange. This means the Scheme Financial Vehicle will know which options have been exercised and will have access to market insights on the possible value of these options with reference to conventional electricity contracts.

As many of the costs, and the timing of these costs, is known or foreseeable, the Financial Trustee and Scheme Financial Vehicle could mitigate the price volatility risk by building a smoothing mechanism into its contribution determination proposal to the Regulator. These cost inputs include:

- cost inputs determined or authorised in advance such as:
  - revenue allowances for network infrastructure projects, and
  - administrative costs
- cost inputs that can be forecast with a minimal degree of uncertainty:
  - LTES Agreement option length. This is proposed to be two financial years<sup>3</sup> with terms including a minimum six-month notice period for exercising options.

<sup>2</sup> The National Energy Retail Law (NERL) requires energy retailers to operate a customer hardship policy to identify residential consumers experiencing payment difficulties due to hardship, and to assist those consumers to better manage their energy bills on an ongoing basis.

<sup>3</sup> Note that the EII Act requires option periods to be no less than one financial year.

**Figure 8 Timeline of key actions for contribution determinations**

It is important that the smoothing mechanism does not simply push costs into a later period, creating a ‘bow-wave’ of costs for consumers in the future.

To mitigate this risk, we are proposing the smoothing mechanism be based on:

- a ‘three-year rolling average’. This would ensure costs are reflected as close to when they occur as possible whilst also having the effect of smoothing contributions year-to-year, and
- setting the ‘three-year rolling average’ with a forecast of two years ahead (two years leading) and one year of known actuals (one year lagging).

The benefits of this approach are:

- distribution business and consumer payments are smooth across three years to limit year-to-year fluctuations
- a mixed rolling average made up of two years leading and one year lagging would ensure a consistent mix for short-term liquidity for the Scheme Financial Vehicle and a closer match of benefits to costs
- given the amount set by the Regulator in a contribution determination is gazetted by 28 February before the relevant financial year, the reality is a mixed rolling average will result in eight months lagging and 28 months leading
- it provides certainty to the Scheme Financial Vehicle that immediate known future costs will be covered with sufficient liquidity to cover these costs
- consumers will be closer to recognising the benefits from the Roadmap at the time of payment, and
- future years’ cost increases will be limited to only a small part of the whole contribution order.

Box 3 outlines how the smoothing mechanism would work in practice.

### Box 3 – Application of smoothing to the Scheme Financial Vehicle

In June 2021 the NSW Government announced funding to support the EII Act's administrative entities. This funding is intended to be provided to the Scheme Financial Vehicle in 2022–23 and repaid across a seven-year period. This enables the Scheme Financial Vehicle to defer contributions from distribution businesses until at least the 2023–24 financial year. It is expected Roadmap costs incurred from the 2022–23 financial year will be paid from this grant until contributions start.

When the first contribution determination is issued in February 2023, it could be based on the rolling average of the following:

- actual financial year costs incurred by the Roadmap up to January 2023
- forecast costs for the remainder of the 2022–23 financial year
- forecast costs for the following two financial years 2023–24 and 2024–25.

The amount specified in a contribution order served by the Scheme Financial Vehicle on a distribution business will be the amount specified in the Regulator's contribution determination.

In the following year, a comparison will be made between the costs that were forecasted and the actual costs incurred since the last contribution determination and contribution order. If the actual costs are higher than forecasted, the next contribution determination and contribution order will need to be increased by the shortfall. If the actual costs are lower than forecasted, the next contribution determination and contribution order can be decreased by this amount. This adjustment to the following year's contribution determination and contribution order is how the Roadmap deals with annual 'unders' and 'overs' in the contribution determinations and contribution orders.

From a cashflow perspective, any annual 'unders' and 'overs' in contribution determinations and contribution orders compared with actual costs will be offset using the Scheme Financial Vehicle Loan Facility. Any cashflow deficits will be funded by the Loan Facility and any surpluses will be held in reserve by the Loan Facility. This deficit or surplus will be applied to the following year's contribution determination and contribution order to increase or decrease the amount accordingly.

## Passing through cost savings

As seen in Figure 5 of this paper, payments into the Fund may include other monies aside from contribution orders via distribution businesses. This could include payments under LTES Agreements or risk management contracts, fees by participants in an access scheme and perhaps proceeds of investments.

The LTES Agreements play an important role in delivering benefits to consumers, as they are an offsetting mechanism against high wholesale prices (see Box 4). For consumers to receive the benefit of any revenue being paid into the Fund from the LTES Agreements, the offset needs to be applied in the year it occurs.

If the cost savings are not passed through in the same year they occur, consumers could pay high wholesale costs and high Roadmap costs at the same time. The outcome of the offset mechanism is to ensure Roadmap costs are low when wholesale costs are high.

### Box 4 – Offset between wholesale prices and LTES Agreement costs

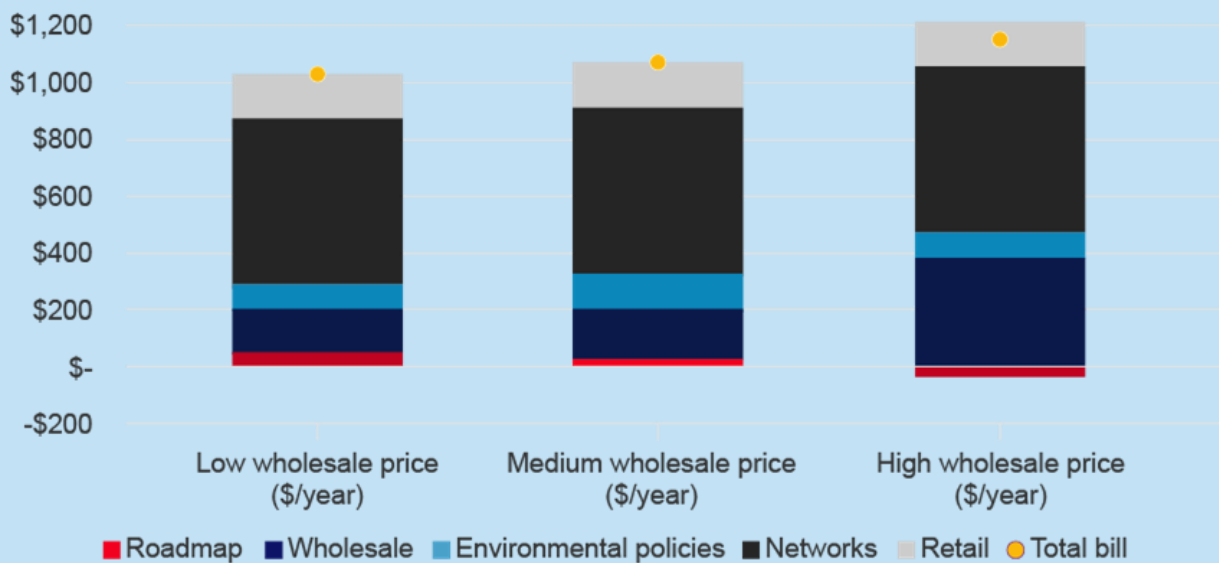
LTES Agreement costs incurred by the Scheme Financial Vehicle will be recovered via the contribution order. There is a natural offset inherent in the fluctuations of LTES Agreement costs, which has the effect of smoothing the net bill faced by consumers.

Figure A shows the offset mechanism as part of overall Roadmap costs on energy bills in the context of low, medium and high wholesale prices of \$35, \$50 and \$90.<sup>4</sup>

Figure B shows the direct offset between wholesale prices and LTES Agreement costs if applied to the last 10 years' wholesale prices.<sup>5</sup>

In years where wholesale prices are below the LTES Agreement fixed price, LTES Agreement costs are passed through to consumers on bills. In years where wholesale prices are above the fixed price, exercised LTES Agreement options could become a revenue stream passed through as a credit.

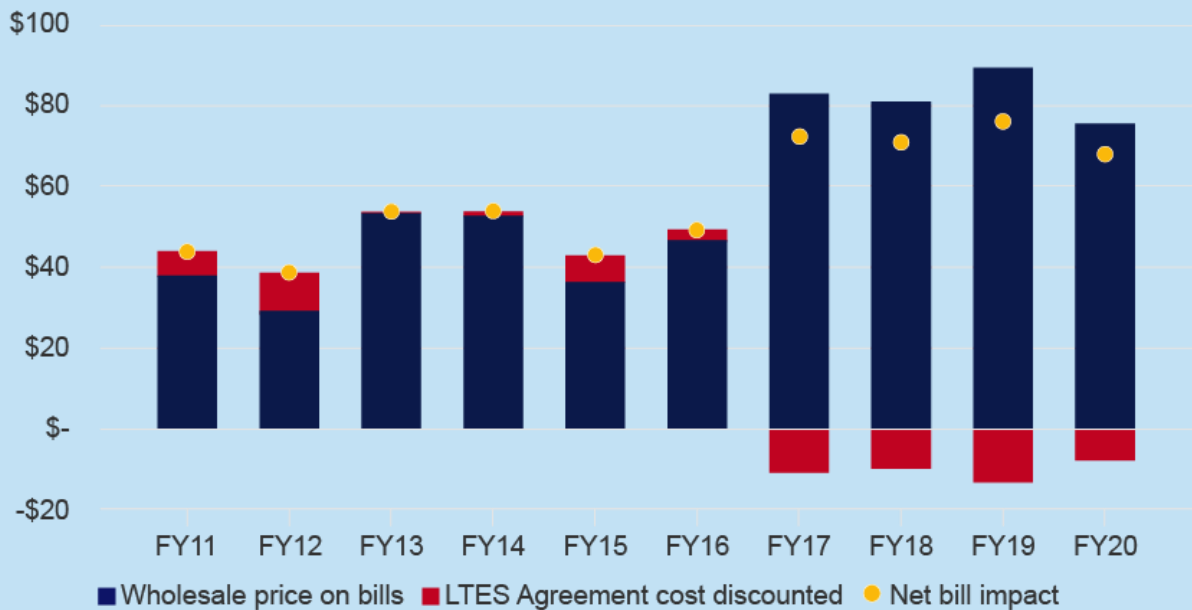
Figure A Offset between Roadmap costs and wholesale prices



<sup>4</sup> Figure A assumes a flat put option swap with a fixed price of \$45 per megawatt hour and 45% probability of option exercise. It is noted that the load-weighted average wholesale prices paid by consumers are related but not equal to dispatch-weighted average wholesale prices typically received by generators. All other costs making up the bill in Figure A are from the Australian Energy Market Commission's [Residential electricity price trends 2020](#).

<sup>5</sup> Wholesale prices shown are NSW Region Trading time-weighted average prices (TWAP) from financial years 2010–11 to 2019–20 sourced from [NEMReview](#). Figure B assumes a flat put option swap with a fixed price of \$45 per megawatt hour and 45% probability of option exercise.

Figure B LTES Agreement costs applied to historical wholesale prices



Should high wholesale market prices (and therefore revenue received from LTES Agreements) push the Scheme Financial Vehicle into profit, it is proposed the Regulator makes a 'negative contribution determination'.

'Negative contribution determinations' would offset the cost of higher wholesale prices and benefit consumers by crediting Roadmap costs during these times. It is proposed that for consumers to maximise the benefit of the offset mechanism, the benefit should be passed back through to consumers in the same year it occurs.

Regulations may be required to set an appropriate threshold for providing credit to customers and to guide any credit process.

### Questions for stakeholders

3. Do you agree contributions from distribution businesses should be paid quarterly to minimise working capital for distribution businesses? Will monthly payments become less problematic in the future?
4. Do you agree the Scheme Financial Vehicle should use a loan facility to smooth costs over time? If not, why?
5. Do you agree a three-year rolling average (one year lagging and two years leading) is the best way to ensure adequate funds are available while also smoothing costs for consumers?
6. Do you agree the scheme should provide for a negative contribution amount? What threshold should be set for applying a negative amount?

## Transparency of costs and benefits to consumers

The EII Act does not give specific guidance as to how to communicate the costs or benefits associated with Roadmap contribution orders to consumers.

In other Australian jurisdictions and international markets, measurement and reporting focuses on scheme costs rather than the broader measure of consumer welfare. Consumer welfare improvements created by the EII Act will likely be measured against baseline data reflecting consumer outcomes in the absence of an action (or actions) of the Consumer Trustee.

Although the communication of a contribution order can be managed through new or existing mechanisms, there remain outstanding questions as to how to best communicate the costs and benefits of the Roadmap to consumers.

There are two parts to this communication task:

- the information provided to consumers, in particular, how the costs and benefits of the Roadmap are depicted, and
- the channels used to communicate with consumers.

Though distribution businesses are not the Roadmap's ultimate financing vehicle and should be no worse off due to their role in relation to the scheme, there may be perceived reputational impacts for distribution businesses due to their role managing cost pass-throughs to consumers and administering the contributions framework with consumers.

As such, the Department is committed to communicating the costs and benefits of the Roadmap as clearly as possible, through the development of regulatory options in close consultation with retailer and consumers groups, and a wider public Roadmap communication strategy depicting Roadmap costs and benefits.

### Depicting Roadmap costs and benefits

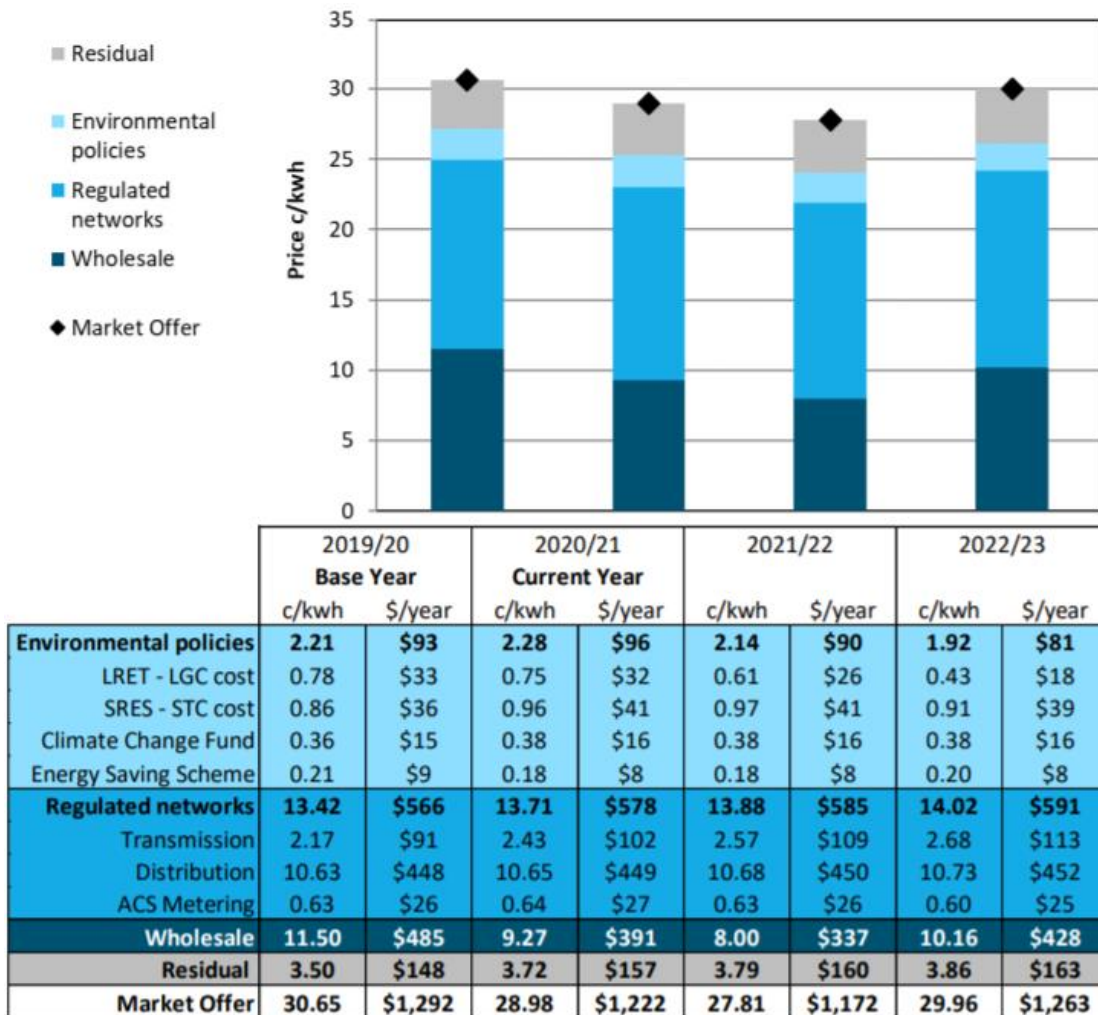
An issue for many schemes in the electricity sector is that consumers receive information about costs in isolation from the broader benefits they provide.

Using the CCF as an example, an annual contribution order is made by the Minister and published in the NSW Gazette. This order includes a single line item identifying the contribution to be made by each distribution business, with no additional detail relating to programs that are supported. Distribution businesses publish the CCF cost pass-through in their network price lists so individual customers can see how much they pay for the CCF. Annual reports on the CCF provide more context on the activities the CCF pays for, and summarise the contributions made to the fund by each distribution business.

Another example of how electricity schemes are depicted is bill breakdowns provided by bodies such as the Australian Competition & Consumer Commission (ACCC) and the Australian Energy Market Commission (AEMC). Figure 9 illustrates the way the AEMC depicts the breakdown of a NSW residential bill in its [Residential electricity price trends 2020](#) report.

One important feature of the AEMC's reporting is that it separates out the different components of network charges so stakeholders can see how much distribution, transmission and jurisdictional schemes (like the CCF) contribute to their bill.

Figure 9 AEMC breakdown of a NSW residential bill



Source: Residential electricity price trends 2020 (AEMC 2020)

Roadmap contributions could also be depicted in publications like the AEMC's Residential Electricity Price Trends report. However, this information presents aggregate costs, without its component parts, and in isolation of benefits. This style of reporting also risks describing the NSW Energy Savings Scheme (ESS) and the Roadmap as environmental policies, whereas the overarching objective of these policies is to reduce energy costs for NSW consumers.

The benefits of the Roadmap are primarily the cost savings from lower wholesale prices relative to a counterfactual scenario where there is no Roadmap. Most schemes, such as the ESS, are assessed against a counterfactual as part of statutory reviews that occur periodically (for example, every five years for the ESS).

One option to make the benefits of the Roadmap more transparent to consumers is to quantify and publish the benefits of the Roadmap on a more frequent basis, such as in each annual report, making this information available to all stakeholders. The information would need to be credible, so stakeholders accept the findings, and relatively simple to assess, so it does not create undue administrative burden.

Information could also be provided about the infrastructure supported by the Roadmap, and the services that infrastructure delivers, including its benefit to local communities. This information would be simpler to collect and report on but may not have the same financial relevance to NSW consumers.



## Communicating Roadmap scheme costs and benefits

We have identified three options for how customer contributions to and benefits derived from the Roadmap could be communicated. The options are not mutually exclusive, and reflect and build on approaches currently used for NSW Government programs:

- **Option 1** – Status quo (Regulator annual report and standard NSW Government communications)
- **Option 2** – Status quo and website
- **Option 3** – Status quo, website and bill information in various formats (Box 5 highlights the current NSW-specific information depicted on bills).

### Box 5 – Depicting information on consumers' bills

The NSW Social Programs for Energy Code sets out the suite of NSW Government assistance measures for residential consumers credited to consumers' bills. In 2019–20, the NSW Government invested \$324.5 million into this suite of assistance measures, which delivered assistance to over 900,000 consumers (DPIE 2020b, Table 1, p.4). Assistance measures under the NSW Social Programs for Energy Code include:

- Energy Accounts Payments Assistance Scheme
- Low Income Household Rebate
- NSW Gas Rebate
- Family Energy Rebate
- Life Support Rebate
- Medical Energy Rebate.

The NSW Social Programs for Energy Code:

- requires retailers to include information on the availability of social programs for energy in all bills issued to residential customers, and
- prescribes the description for each rebate to be listed as a separate credit amount on a customer's bill.<sup>6</sup>

Information about each of these options is included in Table 7. The Department continues to investigate the issues associated with each option directly with consumers, retail market participants and relevant regulatory authorities.

<sup>6</sup> NSW Social Programs for Energy Code v6.0, clauses A4.1.2 and A5.2 respectively.

Table 7 Options to communicate Roadmap costs and benefits

Details	Implementation issues	Benefits	Drawbacks
<b>Option 1 – Status quo: Regulator annual report and standard NSW Government communications</b>			
A model like the CCF where program costs and benefits are detailed in annual reports, which are the basis of communication materials such as press releases and social media.	<ul style="list-style-type: none"> <li>No regulatory amendments or variations necessary</li> <li>Under the EII Act, the Regulator is required to prepare an annual report</li> </ul>	<ul style="list-style-type: none"> <li>No regulatory change required</li> <li>Limited resourcing implications</li> <li>Consistent with the CCF</li> <li>Targeted factsheets or infographics</li> <li>Hard copies of reports on request</li> </ul>	<ul style="list-style-type: none"> <li>Less visible/accessible</li> <li>Reputational risk for distribution businesses</li> </ul>
<b>Option 2 – Status quo + website</b>			
<p>A website providing consumers with information about their contributions to, and benefits from, the Roadmap:</p> <ul style="list-style-type: none"> <li>General – infographics / factsheets for household and business types</li> <li>Personal – ‘calculator’ based on inputs</li> </ul>	<ul style="list-style-type: none"> <li>Modelling would need to underpin an interactive calculator and would need sufficient verification</li> <li>Resources required to implement and maintain the website</li> <li>Responsibility for maintenance to be determined</li> </ul>	<ul style="list-style-type: none"> <li>Visible and transparent</li> <li>Potential for cohort-based or personalised cost information</li> <li>Easily translated</li> <li>Greater potential for social media</li> </ul>	<ul style="list-style-type: none"> <li>Significant resources to deliver and maintain an interactive website</li> <li>Requires consumers to seek information</li> </ul>
<b>Option 3 – Status quo + website + bill information</b>			
<ul style="list-style-type: none"> <li>3A: Line item on bills reflecting average contributions and benefits within billing period</li> <li>3B: Stamp or image on bills giving general information about contributions and benefits within the billing period</li> <li>3C: Reference on bills to the website for more information</li> <li>3D: NSW Government emails / factsheets for retailers to use with customers about potential price changes</li> </ul>	<ul style="list-style-type: none"> <li>Changes to bill information may require modifying the NSW National Energy Retail Law Adoption Regulation and approval from the Energy National Cabinet Reform Committee</li> <li>Consultation and changes could take up to 12 months to implement</li> <li>Retailer cooperation needed for implementation options that do not use regulatory measures</li> <li>Transparent/robust method needed for calculating the contribution amount a typical NSW consumer would likely pay and the net benefits</li> </ul>	<ul style="list-style-type: none"> <li>Visible and transparent</li> <li>Mitigate potential consumer confusion and minimise the reputational risk for distribution businesses</li> </ul>	<ul style="list-style-type: none"> <li>Option 3A may impose a burden on retailers due to software system changes</li> <li>Publishing net benefits on bills may prompt criticism. This could be mitigated by a transparent/robust method for calculating amounts</li> <li>Adds to bill complexity</li> </ul>

Table 8 shows our assessment of Options 1 to 3 against the guiding principles, noting the 'Stable' principle may not apply.

Options 2 and 3 appear to meet the 'Equitable' principle, as websites:

- are easily translated into different languages
- can be made accessible for people who have vision impairment or low vision, and
- can be printed for distribution to people without access to the internet.

Option 3, however, does not meet the 'Simple' principle.

Though it is generally agreed that a bill is a good way for consumers to access information about their prices, understanding what information and the level of detail is useful for consumers may not be straightforward. For example, determining the average cost and net benefit for an indicative NSW residential or small business consumer might be easier to implement (rather the actual costs for each individual consumer), but it is unclear whether a consumer would find this generalised information on their bill helpful.

**Table 8 Comparison of guiding principles with transparency options**

Option	Adequate	Simple	Auditable	Equitable	Stable
1. Status quo	✓	✓	✓	✗	—
2. Status quo + website	✓	✓	✓	✓	—
3. Status quo + website + bill information	✓	✗	✓	✓	—

### Questions for stakeholders

7. Do you agree it is important for consumers to understand the component parts of Roadmap scheme costs (e.g. payments under LTES Agreements compared to network infrastructure)?
8. How can the benefits of the Roadmap be assessed and communicated, ensuring the information is up-to-date, accepted by stakeholders, relevant for consumers and without significant administrative burden?
9. Do you agree a mixture of annual reports, website(s) and bill information is the best way to inform consumers about the benefits and costs of the Roadmap? Is there a simple way to provide bill information?

## Exemptions

This section looks at how the Roadmap may establish and administer exemptions.

The expansion of renewable energy has changed the electricity pricing mix and in contrast to specific programs aimed at building the renewable energy sector, the Roadmap aims to reduce the cost of the business-as-usual energy system for all NSW consumers.

Under section 58(2) of the EII Act, the amount specified to be paid by the distribution businesses is subject to requirements prescribed by the regulations. Section 58(6) of the EII Act states that the regulations may make provisions to exempt payment from parties that are exempt from the ESS under clause 22 of Schedule 4A to the *Electricity Supply Act 1995*, or from a person who buys electricity to use in the production of hydrogen energy.

The policy intent of the exemption of EITE entities is consistent with the objects of the EII Act to support economic development and manufacturing. The Department intends to recommend regulations under the Act to enable exemptions. Work is ongoing to understand the potential impact on Roadmap costs for other consumers.

### Exemptions from the energy savings scheme

Clause 22 of Schedule 4A of the Electricity Supply Act states that the Minister may grant exemptions from the ESS for an electricity load that is used in connection with an industry or activity that is both emissions intensive and trade exposed (EITE). The EITE entity can be fully exempted or partially exempted from the scheme. Historically, partial exemptions of either 60 or 90% have been applied under that scheme.

The activities and locations of electricity loads exempt from the ESS are listed in a Ministerial Order published each year in the NSW Government Gazette. The types of loads exempted are aluminium, steel, cement and ammonia producers.

The most recent exemptions order for the ESS (2021)<sup>7</sup> covers 27 sites in NSW providing a 90% exemption for each EITE entity. Energy users with 90% exemptions are still eligible to participate in the ESS and to receive financial incentives for eligible energy saving activities. EITE entities under the ESS comprise around 16.5% of total electricity consumption in New South Wales.

The ESS was established in 2009 to complement the then proposed Carbon Pollution Reduction Scheme (CPRS) and an expansion of the Renewable Energy Target (RET) by providing an energy efficiency component. EITE entities were provided with assistance under the proposed CPRS and partially exempted from liabilities under the expanded (but not original) RET target as:

*... these activities face competition from industries in countries that are not faced with meeting similar environmental obligations.*<sup>8</sup>

Exemptions under the ESS were intended to align with the approach taken by the Commonwealth, by providing assistance under the proposed CPRS and exemptions from the expanded RET to reduce compliance costs.

<sup>7</sup> See [Amended Ministerial Order - Electricity Load Exemptions - 2021 Compliance Year](#)

<sup>8</sup> Electricity Supply Amendment (Energy Savings) Bill 2009, Second Reading Speech, Legislative Council, 16 June 2009

## Exemptions for EITE entities under the CPRS and RET

The concept of EITE entities originated with the development of the former Commonwealth Government's proposed CPRS. The proposed CPRS imposed additional costs on emitters with:

*... the more emissions they produce per unit of output, the higher the relative cost.*  
(Commonwealth of Australia 2008, p.27)

There was concern that, in the absence of assistance, EITE entities would choose to locate elsewhere, with no consequent reduction in global emissions. In response, it was proposed to provide EITE entities with assistance:

- EITE entities with an emissions intensity greater than 2000 tCO<sub>2</sub>-e per million dollars of revenue would have assistance at around 90% of industry average emissions per unit of output, and
- EITE entities with an emissions intensity between about 1500 and 2000 tCO<sub>2</sub>-e per million dollars revenue would have assistance at around 60% of industry average emissions per unit of output. (Commonwealth of Australia 2008, p.28)

As a broad range of activities were covered by the proposed CPRS, emissions intensity included both scope 1 emissions (direct emissions from owned or controlled sources) and scope 2 emissions (indirect emissions from the generation of purchased electricity, steam, heating and cooling).

For administrative simplicity, the same entities were exempted from the Commonwealth RET even though RET liabilities were based on energy consumption rather than emissions.

## Exemptions in the context of the Roadmap

### The case for exempting EITE entities under the Roadmap

The principle of exempting entities from a scheme is to ensure key businesses and industries do not incur costs that may threaten their international competitiveness and to allow expansion of their capacity to meet increased global demand.

The Fund is different to the other schemes as the Roadmap is designed to achieve annual savings relative to an electricity bill that would otherwise have been paid in the absence of the Roadmap. The net costs associated with the Roadmap will depend in part on the:

- way in which costs associated with the Fund are recovered from customers, and
- proportion of load exempted from contributing to the Fund.

The design of the cost recovery framework will determine the distributional impacts associated with the recovery of Fund costs and whether the costs recovered will offset bill savings in a similar way across all parties, or if there will be a net cost for some parties and a net benefit for others.

The EII Act does not currently allow for the recovery of Roadmap costs from direct transmission-connected customers. Applying the principle that beneficiaries of the Roadmap should contribute towards the costs of the scheme may yield a different result. The Department notes this issue may need to be considered by policy makers in the future.

The higher the proportion of load that is exempt from contributing to the Fund, the higher the costs that are recovered from all other consumers, such as residential households. The analysis presented in the Roadmap Detailed Report indicates all NSW consumers will benefit if the Roadmap is implemented well (DPIE 2020a).

The case for exempting EITE entities is stronger if they incur a disproportionate share of the costs associated with the Fund, increasing their costs relative to business-as-usual, resulting in adverse

impacts on their international competitiveness. As the Roadmap is intended to reduce electricity costs for all consumers, partial exemptions may be more appropriate than full exemptions. However, though partial exemptions may be necessary, larger companies are transitioning to a carbon neutral operating environment to remain globally competitive.

Australia's largest energy user, and an existing EITE entity, the Hunter Valley's Tomago aluminium smelter recently announced plans to switch to 100% renewable energy by 2030 (MacDonald-Smith 2021). The Roadmap could incentivise this type of transition for other EITE entities by using a phased approach, gradually reducing the exemption percentage over time.

As the purpose of an exemption is to ensure an EITE remains competitive in international markets, a comparison of changes in end-use electricity prices for EITE entities with changes in end-use electricity prices in selected countries could help determine the viability of exemptions over time. This could be undertaken periodically, using an index such as the one published by the International Energy Agency.

## Partial exemptions

An additional option could be established to grant eligible EITE entities exemption from select components of the Roadmap costs. The Roadmap costs broadly relate to:

- **generation costs** – generation projects being built under the scheme through standard LTES Agreements
- **capacity costs** – costs related to capacity such as network projects and long duration storage and firming LTES Agreements.

Under a partial exemption, eligible EITE entities could be granted an exemption from the generation costs of the Roadmap only, but would still contribute to the capacity related costs of the system. There are also administration related costs which could be apportioned equally across both generation and capacity components, meaning any partial exemption granted to an eligible EITE entity would also receive a part exemption for scheme administration costs.

As the capacity costs are anticipated to be more predictable and stable over time, this would limit the volatility in exemption costs, resulting in stability of costs for all consumers. This option would better reflect the impact of Roadmap costs on EITE entities and benefit all other consumers by lessening the overall cost impact.

This option to provide an exemption for some cost components may only work if the apportionment method chosen were the 'energy delivered and peak demand' allocation (Option 7 in Table 3 above).

Aurora Energy Research estimated the costs associated with the Roadmap and showed that it would deliver lower cost bills to consumers, even assuming a portion of NSW industrial load (~11.5 terawatt hours) was 90% exempt from the Infrastructure Safeguard costs (DPIE 2020a).

To meet the objectives of the EII Act and to align with other schemes, the Department proposes a 90% exemption for EITE entities for generation costs. This exemption will be reviewed as part of the EII Act's statutory review process.

## Administering exemptions

Under section 56(1) of the EII Act, the Regulator determines the amount to be recovered from the distribution businesses on an annual basis.

The framework for administering exemptions needs to consider the:

- process for determining which entities are exempt, and
- mechanism for exempting those entities from payment.

## Process for determining which entities are exempt

A distribution-connected entity's application for exemption from the Roadmap could be determined by the Regulator or the relevant distribution business.

A determination via the Regulator would ensure consistent exemption decisions are made across the distribution businesses and can take those decisions into account in making a contribution determination. While the distribution business is well placed to consider the impact of the contribution on the entity's electricity costs, the Regulator is better placed to consider the extent to which the entity is trade exposed and also exempt from the ESS.

This approach would be consistent with the roles of regulators in other schemes – the Independent Pricing and Regulatory Tribunal (IPART) and the Clean Energy Regulator (CER) administer exemptions for the ESS and RET respectively. Both IPART and the CER already access AEMO settlement data to reconcile information provided by exempt parties.

## Mechanism for exempting those entities

The mechanism for exempting some customers from paying a portion of scheme costs needs to consider the:

- impact of reducing payments from exempt parties on the contribution amount for the distribution business (for example, distribution businesses may need to over-recover scheme costs to allow for the exemption), and
- way in which the contribution amount is or is not recovered from customers by the distribution business.

As EITE entities are dispersed across distribution businesses, the Regulator will need to exclude all EITE exempt portions, when allocating the contribution determination to the distribution businesses. This will ensure that a given distribution business customer base does not pay disproportionately more than another simply because there are more EITE entities in that area. The total contribution amount will remain the same, but the costs will be split among all remaining customers, meaning costs to non-EITE consumers will be marginally higher.

The Department's current preferred approach to effect exemptions is to provide the discount up front by distribution businesses amending their information technology systems. Roadmap regulations could direct distribution businesses to not apply Roadmap costs to eligible EITE customers. The Department is investigating how this could work in practice with the distribution businesses.

Should this prove too expensive or administratively complex, a rebate approach is considered the next best option for implementing exemptions. In this case, it is envisaged distribution businesses would charge an EITE entity for the exempt portion and this amount will have to be rebated at a later stage in the year. If the alternative approach of providing a rebate is taken the following decisions would be required:

- how frequently the rebate is paid, and
- whether the rebate is paid by the Scheme Financial Vehicle directly to the exempt entity, by the distribution business to the exempt entity, or by the energy retailer to the exempt entity.

This administrative complexity of the rebate approach will depend on: who the responsibility falls on; whether they have an existing relationship with the exempt entity; and whether the process could be automated or must be done manually.

A third option for applying exemptions is for distribution businesses to discount EITE entity tariffs through either (a) the creation of a new exempt tariff class, or (b) the amendment of an existing tariff class. This option is not being progressed due to a preference for avoiding the need to create a new tariff class.

The Department is in favour of the Regulator administering the exemptions framework for the Roadmap. This is consistent with other jurisdictional schemes and is aligned with the typical core functions of a Regulator. The Department will work with the Regulator on how exemptions can be administered without the need for rebates, making for a smoother and simpler administrative process. In parallel, the Department will also continue to investigate the most appropriate entity to provide a rebate should this be necessary, again ensuring the most efficient, least cost and simplest administration process for the entity.

## Exemptions for green hydrogen production

The EII Act also provides for exemptions relating to electricity used for hydrogen production. While uptake of hydrogen is not anticipated to occur at scale until 2025, regulations could specify an exemption for green hydrogen (from renewable sources). There are currently no hydrogen energy producers included in the list of EITE entities. However, the provision of an exemption for green hydrogen is intended to allow for the development and expansion of the green hydrogen industry to maximise the opportunity for Australia in the global export industry.

The NSW Government has recently announced an \$83 million funding agreement with EnergyAustralia to deliver the at least 300-megawatt, dual fuel hydrogen/gas plant at Tallawarra. EnergyAustralia will offset its direct emissions and use NSW-produced green hydrogen as part of its fuel supply from 2025.

The NSW Government has separately announced an intention to invest \$70 million in clean hydrogen hubs with a focus on the Hunter and Illawarra regions. The NSW Hydrogen Strategy is currently being developed and is expected to be released later this year. This strategy will set out a framework for industry support, including exemptions for green hydrogen producers from certain charges. These actions reflect industry support mechanisms to encourage new technologies, supplementing consideration of an exemptions framework for hydrogen under the Roadmap.

This provides greater confidence for developers and investors that hydrogen industries will be established in New South Wales, build scale from 2025 onwards and mature to widespread commercial uptake from 2030 onwards. The former Council of Australian Governments Energy Council estimated the hydrogen industry could generate approximately 7600 jobs and \$11 billion per year in additional GDP by 2050 across Australia (DPIE 2020c, p.4).

With the introduction of carbon pricing mechanisms in Europe, export industries are becoming increasingly conscious of their emissions intensity. The rise of green hydrogen energy could significantly benefit NSW export industries such as agriculture, synthetic fuel, steel and ammonia. Both steel and ammonia production are listed as EITE industries under the RET and for the NSW ESS.

There is the option to exempt green hydrogen under a phased approach, across five to 10 years for example, to support the development of the industry in the period before New South Wales takes advantage of the global export opportunity. To provide investors with confidence, the percentage of exemption could be staged in cohorts that last in perpetuity. For example, a hydrogen producer in 2025 may be eligible for a 100% exemption from Roadmap costs for the lifetime of the plant, but a new green hydrogen producer in 2030 may only be eligible for a 20% exemption for its plant's lifetime. This would encourage the use of renewable energy as soon as a plant is operationalised, expediting the development of the green hydrogen industry.

Significant advances in technology and capability are expected before the current high cost of green hydrogen will come down. Barriers to cost-effective fuel storage and transporting to use locations will need to be overcome before achieving cost competitiveness in the future. While the cost of green hydrogen has already decreased by 60% since 2006 and is projected to fall a further 30% by 2025 (DPIE 2020a), there is still significant need for support to make green hydrogen cost competitive.



Global demand projections and commercial trends may support specific reference to green hydrogen production in the regulations. This exemption would assist cost competitiveness and position the green hydrogen industry for future opportunities in international markets prioritising green products. This matter will be dealt with as part of a comprehensive framework under the State's Hydrogen Strategy.

### Questions for stakeholders

10. Do you agree with exempting entities up-front or would you prefer a rebate approach? Why?
11. If exemptions were administered on a proportional scale (between zero and 100%), how could we categorise which entities should be subject to which level of exemption?
12. Do you agree green hydrogen production should be treated in the same way as other emissions intensive and trade exposed industries, or should it be treated differently?

## Fund administration

Effective governance and transparency of expenditure and revenue will be essential to maintain the integrity of the Roadmap and ensure consumer interests are prioritised. A strong financial reporting framework can articulate processes and outline issues about which the Fund is to report.

## Fund governance

As noted earlier, the EII Act requires the Minister for Energy and Environment to appoint a Consumer Trustee. Once appointed, the Consumer Trustee will appoint a person or body as the Financial Trustee, who will establish the Scheme Financial Vehicle. Section 62 of EII Act states that the Scheme Financial Vehicle must act in a commercially reasonable and prudent way under any contract or agreement made under the EII Act.

Once established, the Scheme Financial Vehicle will, in turn, establish and maintain the Fund. Money held in the Fund is to be paid into an account kept with an authorised deposit-taking institution. In appointing the Financial Trustee, the Consumer Trustee will be responsible for ensuring that no conflict of interest exists including in respect to the Scheme Financial Vehicle.

Section 51(1) of EII Act also requires the Consumer Trustee to prepare a risk management framework. The framework will be designed to protect the financial interests of NSW electricity customers from risks associated with LTES Agreements. The framework may provide for the functions of the Consumer Trustee, the Financial Trustee, the Scheme Financial Vehicle and the Regulator.

## Industry standards on financial reporting

It is proposed that the Fund be subject to financial reporting requirements that may need to be prescribed by regulations. It is anticipated that monthly and annual financial statements will be required. Existing guides providing context for possible reporting regimes include the Australian Accounting Standards (AAS). Reporting for the Fund will depend on, and link closely to, the Consumer Trustee risk management framework.

The AAS refers to financial statements being a fair presentation of the financial position, financial performance and cash flows of an entity.

Fair presentation requires the faithful representation of the effects of transactions, other events and conditions, in accordance with the definitions and recognition criteria for assets, liabilities, income and expenses. Applying this approach, with additional disclosure when necessary, should result in financial statements that achieve a fair presentation.

Options relating to financial reporting may include:

- an income statement for that month, the current financial year to date and full year forecast with a comparison to the budget for those periods
- a cashflow statement for that month, the current financial year to date and full year forecast with a comparison to the budget for those periods, and
- a balance sheet statement for that month, the current financial year to date and full year forecast with a comparison to the budget for those periods.

These would be prepared monthly in accordance with accepted Australian accounting principles and consistently applied.

### Question for stakeholders

13. Do you agree the options outlined are an effective approach for financial reporting for the Fund? Are there any additional considerations?

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