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Economists

Open consumer energy data

Applying a Consumer Data Right to the energy sector

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Report Authors

Adrian Kemp

Martin Chow

Contact Us

Sydney

Level 40
161 Castlereagh Street
Sydney NSW 2000

Phone: +61 2 8880 4800

Singapore

8 Marina View
#15-10 Asia Square Tower 1
Singapore 018960

Phone: +65 6817 5010

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Executive Summary

Australians are being given a Consumer Data Right to allow them to access and control the transfer of certain data about them held by businesses. The right will allow consumers to choose to transfer data about themselves to trusted and accredited third parties, who in turn can help them to make better decisions about products and services available to them.

Open consumer energy data is the application of a Consumer Data Right to the energy sector.

Like in the banking sector, there are challenges for consumers choosing between products and services available to them because they are inherently linked to their personal circumstances. Applying a Consumer Data Right to the energy sector will facilitate access to consumers' data, enhancing the scope for greater competition in energy market products and services thereby helping consumers to achieve the best deal for them.

Prior to the Consumer Data Right being announced, HoustonKemp Economists had been engaged by the Council of Australian Governments (COAG) Energy Council to investigate how best to facilitate greater access to consumer energy data. Once the broader Consumer Data Right was announced the focus of our work shifted to considering how best to apply the Consumer Data Right framework to the energy sector.

This report sets out the conclusions we have reached as to the steps necessary for applying a Consumer Data Right to the energy sector.

Facilitating the transition to a Consumer Data Right in the energy sector

The Consumer Data Right governance and regulatory framework is being developed in the context of its application to the banking sector over the coming months, so that it can commence in banking from July 2019. To ensure that a Consumer Data Right can also be promptly applied to the energy sector we are recommending that:

- the Australian Energy Market Operator, who is currently responsible for data standards and transfer matters in the National Electricity Market, commence working in collaboration with the Australian Competition and Consumer Commission, and the data standards body, Data61 to ensure that the rules and standards can be applied to consumer energy datasets; and
- all registered energy market participants be immediately accredited as a party for the purpose of accessing consumer energy data subject to a Consumer Data Right.

There are a number of regulatory framework matters where we believe there will be a need for different approaches to those likely to be applied to the banking sector. These mostly arise in the approach to verification of identity and consent, given the unique features of the energy market.

Electricity metering data should be immediately designated as subject to a Consumer Data Right, with other consumer energy datasets to follow soon thereafter

Consumers currently have a right to authorise a third-party representative to access their electricity metering data, through changes to the National Electricity Rights made in 2014. Applying a Consumer Data Right to electricity metering data will address a number of known impediments to third parties accessing consumer electricity metering data, and so will be an important step towards improving the accessibility of consumer data in the energy sector.

However, there are a number of additional datasets which we believe need to also be subject to a Consumer Data Right, to allow third parties to provide a range of energy market services. These include NMI standing data, retail gas metering data, and electricity and gas retail product data.

Meter standing data includes data about the connection point, and importantly the network tariff code, which determines what retail products can be offered to the customer. In this way it is very helpful for facilitating the provision of many of the use cases associated with access to consumer energy data.

Making consumer gas metering data subject to a Consumer Data Right is needed to allow comparisons to be made between product offerings for those consumers that use both electricity and gas.

In the banking sector, retail product data is being included in the consumer datasets subject to a Consumer Data Right to ensure that appropriate comparisons can be made between competing retail products and new product offerings. Given the complexities of energy market product offerings, a similar argument can be made for making energy retail product data available.

It follows that we are recommending that NMI standing data, consumer gas metering data, and consumer electricity and gas retail product data be designated as subject to a Consumer Data Right. In light of the need to consider details as to how best to make such data available, we are recommending that this right become effective as of June 2020.

Finally, while consumers in the National Electricity Market have had a right to authorise third-parties to access consumer electricity metering data, the same right has not existed for consumers outside of the National Electricity Market (ie, in Western Australia and the Northern Territory). Both of these markets are subject to retail market competition, and are seeing emerging investment in new technologies and so warrant being included in the Consumer Data Right framework.

It follows that we are recommending that consumer electricity metering data outside of the National Electricity Market be designated as subject to a Consumer Data Right, effective as of June 2020.

The Consumer Data Right regulatory framework will need to accommodate the features of the energy sector for implementation

The key to the achievement of benefits from facilitating third-party access to consumer energy data is the provision of data on-demand. This is because, consumer decisions in the energy sector typically arise infrequently, such that providing timely advice when a consumer is considering a decision is paramount. For this reason, we are recommending that the objective for the Consumer Data Right rules as it relates to consumer energy data should be:

To facilitate on-demand access by a consumer's authorised accredited representative to consumer energy datasets in a manner that promotes the long-term interests of consumers.

Currently the Consumer Data Right framework is primarily focused on access by an accredited representative. We believe clarification is required in the Consumer Data Right to also provide the basis for consumers to directly access data (ie, not via an accredited representative) in certain circumstances. For this reason, we are recommending that further investigation is required into how the Consumer Data Right framework is applied to provide consumers with a right to directly access any consumer energy dataset subject to a Consumer Data Right.

A key area of the framework where we expect the energy sector to differ from the framework likely to be applied in the banking sector is in the verification of a consumer's identity and consent to an accredited third-party. To facilitate on-demand access to data, we are proposing that accredited third parties obtain consent from consumers in line with the rule requirements, but that energy data providers are not required to verify that consent has been obtained at the time of a data request from a third-party. Rather compliance with the consumer consent requirements would be verified through an auditing compliance framework administered by the ACCC, with appropriate penalties in place for non-compliance by an accredited third-party.

We believe this approach strikes a balance between managing privacy risks for consumers from fraudulent access by an accredited third-party, and the need to provide on-demand access to data.

Consistent with the approach taken in Open Banking, we are also recommending that consumer complaints arising from the creation of a Consumer Data Right in the energy sector should be managed through existing external dispute resolution schemes applying to the energy sector in each jurisdiction. These existing

schemes are familiar with the energy market as well as existing institutions and market participants, and so are well placed to provide an effective complaint management system for the Consumer Data Right.

Finally, given our opinion that an ex-post auditing framework is likely to be appropriate for the energy sector, there is merit in the Consumer Data Right rules providing record-keeping obligations in addition to specifying the auditing regime to apply to accredited third-parties accessing consumer energy data. There should also be specific penalties for breaches of these rules as they relate to the energy sector, to ensure that sufficient incentives are in place for accredited third-parties to only access data when the appropriate consents have been obtained.

AEMO should be designated as the data provider for electricity metering data in the National Electricity Market

Our analysis suggests that the Australian Energy Market Operator (AEMO) is well placed to be designated as the data provider for electricity metering data in the National Electricity Market. This is because it has access to metering data via its existing data transfer mechanisms, and it would likely be the most cost-effective and timely solution to facilitating access by third-parties to consumer metering data. Importantly, it would avoid the need for duplication of systems, across each of the distributors and/or retailers if they were designated as being the data provider.

That said, consideration will need to be given by the Australian Competition and Consumer Commission to the organisation(s) that should be designated as the data providers for gas metering data, electricity and gas retail product data, and electricity metering data outside of the National Electricity Market. There are a number of practical and other considerations that will be relevant to determining the most appropriate data provider to make these datasets available.

Next steps

Under the CDR framework, the Treasurer will be able to designate AEMO as a data provider. To facilitate the implementation of a Consumer Data Right in the energy sector there is also a need to make necessary amendments to the National Electricity Rules, to ensure that AEMO can act as a designated data provider and maintain a data platform to provide consumer data access services in the future. In addition, additional work will need to be undertaken to ensure the Consumer Data Right rules and standards are appropriate for application in the energy sector, as well as considering data providers for additional consumer energy datasets.

We believe that consumer electricity metering data should be available under a Consumer Data Right no later than December 2019, with other datasets being made available no later than June 2020. This timetable will need to be considered by the ACCC as it manages the implementation of the Consumer Data Right, but is consistent with that proposed for the introduction of the Consumer Data Right in the banking sector.

Summary of recommendations

Applying the Consumer Data Right to the energy sector

Recommendation 1: The COAG Energy Council should direct the Australian Energy Market Operator to commence working in collaboration with the Australian Competition and Consumer Commission, Data61 and other stakeholders to develop the Consumer Data Right rules and data standards, to ensure that the rules and standards are appropriate for consumer energy datasets.

Recommendation 2: The COAG Energy Council request that registered market participants in the National Electricity Market be recognised as accredited parties to access consumer energy data subject to a Consumer Data Right.

Consumer energy datasets to be designated as subject to a Consumer Data Right

Recommendation 3: The COAG Energy Council request that the Treasurer immediately designate electricity metering data as attracting a Consumer Data Right in the National Electricity Market.

Recommendation 4: The COAG Energy Council request that the Treasurer designate NMI standing data, retail gas metering data, electricity and gas retail product (pricing) data, and electricity metering data outside of the National Electricity Market to be made effective no later than June 2020.

Energy sector requirements for the Consumer Data Right rules and standards

Recommendation 5: The objective for the Consumer Data Right rules as it relates to consumer energy data should be 'to facilitate on-demand access by a consumer's authorised accredited representative to consumer energy datasets in a manner that promotes the long-term interests of consumers.'

Recommendation 6: Consideration should be given to clarifying how the Consumer Data Right framework is applied to provide consumers with a right to directly access any consumer energy dataset subject to the Consumer Data Right from a designated data provider.

Recommendation 7: The Consumer Data Right rules should not require designated energy data providers to verify that an accredited third-party data seeker has obtained explicit informed consent from consumers at the time that a data request is made. Verification of consent should be part of the third-party accreditation compliance and auditing functions of the Australian Competition and Consumer Commission.

Recommendation 8: The COAG Energy Council should agree in principle to using existing jurisdictional energy external dispute resolution schemes for managing consumer complaints arising from the establishment of the CDR in the energy sector.

Recommendation 9: The Consumer Data Right rules should provide additional auditing and record-keeping requirements on accredited third-party energy data seekers to ensure compliance with energy sector specific rules for verification and consent to access consumer energy data.

Recommendation 10: Specific penalties for breach of the Consumer Data Right rule requirements relating to verification of identity and consent when accessing consumer energy data should be developed to reflect the greater risks from an ex-post verification framework for accessing consumer energy data.

Designation of data providers subject to a Consumer Data Right in the energy sector

Recommendation 11: The COAG Energy Council request the Australian Competition and Consumer Commission to examine and designate a data provider for consumer gas metering data, retail product data, and electricity metering data outside of the National Electricity Market, no later than 12 months prior to those datasets being subject to a Consumer Data Right.

Recommendation 12: The Australian Energy Market Operator be designated as the Consumer Data Right data provider for electricity metering and NMI standing data in the National Electricity Market.

1. Introduction

Everyday data about consumers is collected and used in a multitude of ways to facilitate the provision of goods and services. With the growing availability of consumer data, there have been concerns raised about what rights consumers have to access and make use of data collected about themselves. This is particularly the case in circumstances where accessing such data can help consumers to make better consumption decisions and facilitate greater competition in the provision of goods and services.

Accessing consumer data is particularly important in the energy sector, where consumers need to make choices between complex electricity pricing offers, and whether solar PV, battery storage technologies, or other energy saving alternatives are worth investing in. Accessing energy data will benefit consumers by allowing advice to be provided based on an individual's circumstances, for example by:

- helping consumers choose an electricity pricing offer that is best for them;
- allowing retailers to tailor electricity pricing offers to consumers;
- facilitating targeted advice on solar PV, battery storage and other energy saving technologies; and
- providing advice on opportunities to lower bills through energy efficiency improvements.

It is within this context that Australian consumers are being given a general Consumer Data Right (CDR), allowing them to control data collected about them, including who can have and use it.

The recently released Review into Open Banking report¹ sets out a general regulatory framework for the CDR to facilitate access and control of consumers' data across all sectors of the economy. The report also explains how the regulatory framework will be applied to the banking sector, including the types of banking data to be the subject of a CDR (ie, consumers' banking transactional data, product data, and consumer reference data), and how privacy and data security concerns will be managed.

The Treasurer has announced that the government will be implementing the recommendations of the Review into Open Banking in a phased way, from July 2019, with the energy sector having been identified as a priority for applying the CDR framework.²

A right for consumers to access data is not new in the energy sector, with Australia's energy consumers having been given a right to access electricity metering data from electricity retailers and distributors on 6 November 2014.³ The original consumer energy data right was amended in 2015 as part of changes to Chapter 7 of the National Electricity Rules (NERs), to facilitate competition in metering. The energy electricity data right is set out in the NERs and the National Energy Retail Rules (NERRs),⁴ and gives consumers⁵ the right to access their metering data,⁶ and a right to authorise third-party representatives to access the data on their behalf.

¹ The Treasury, *Review into Open Banking*, December 2017.

² See, <http://sjm.ministers.treasury.gov.au/media-release/049-2018/>, and <https://treasury.gov.au/consumer-data-right/>.

³ See Rule 7.7, NERs, version 66.

⁴ See NERs, 7.15.5(d), and NERRs, 56A and 56B.

⁵ Both residential and business, small and large customers, in accordance with the definitions set out in the National Electricity Rules and the National Electricity Retail Rules.

⁶ Metering data means electricity metered consumption data and includes electricity accumulated metering data, interval metering data, calculated metering data, substituted metering data, estimated metering data and check metering data, as defined in Chapter 10, Glossary, NERs.

In addition, the NERRs also provide a consumer with a right to access gas metering data, from the gas distributor.⁷ However, unlike for electricity, there is no right for a customer authorised representative to access that data.

While the right to access metering data in the energy sector has led to improvements in data access by consumers⁸, it has not led to an anticipated increase in the use of the data, particularly by value adding authorised third parties. Part of the reason is that there remain several impediments to accessing the data, including (amongst other things):

- complex arrangements put in place by distributors and retailers for authorising third parties to access data, to manage privacy obligations;
- lack of uniformity about data access arrangements, including processes for fulfilling privacy obligations, data formats, and data provision arrangements; and
- the length of time from which a data request is made, and the data provided.

These access impediments impose costs on third parties wanting to provide value added services to consumers and likely reduce the scope for third parties to provide timely services to consumers, which has contributed to the lack of growth in the provision of these services.

These impediments will be addressed by applying the CDR to the energy sector. Put simply, the CDR provides a more comprehensive regulatory framework than is currently in place to facilitate access to consumers' energy data, particularly by third parties seeking to provide value added services. This is achieved through the application of the CDR regulatory framework, which addresses the common consumer data privacy concerns, whilst balancing the need to facilitate practical on-demand access to data.

HoustonKemp has been engaged on behalf of the Council of Australian Governments' (COAG) Energy Council to examine how, and make recommendations for, streamlining the process, and facilitating timely access to consumers' energy data by authorised third-party service providers. Given the government's decision to implement an economy-wide CDR and associated governance arrangements, our task has evolved to focus on how best to apply the CDR to the energy sector given the CDR's regulatory framework.⁹

The remainder of this report explains how the CDR should be applied to the energy sector. In so doing, we also set out the practical next steps that are needed for implementation.

Our recommendations and conclusions have benefited from insights gained through submissions provided to us by interested parties, and information gained through consultations with electricity distributors, retailers, third-party consumer service providers, and consumer representatives, on our own proposed framework for facilitating third-party access to consumers' energy data. This framework was developed prior to the government's decision to implement a CDR. This input has been invaluable to the formulation of our preferred approach to achieving the vision of a CDR in the energy sector, which provides on-demand access to consumers' energy data by authorised third parties.

The remainder of this report is structured as follows:

- section 2 summarises the regulatory framework proposed for a CDR, and how the unique characteristics of the energy sector can be best integrated into the framework;
- section 3 discusses the consumer energy datasets that should be designated for a CDR;

⁷ See NERRs, 86B.

⁸ References to consumers in this report is to be taken to mean all residential and business consumers, supplied by a retailer.

⁹ Energy Consumers Australia highlights in its response to our discussion paper its support for achieving progress in facilitating access to consumer energy data through the framework set out for a general CDR. See Energy Consumers Australia, (2018), Consumer Access to Energy Data – Response to Government Consultation, March.

- section 4 explains our proposed approach to applying the CDR regulatory framework to the energy sector, with a particular focus on verification of consumer identity and consent;
- section 5 describes who should be designated as the data provider for consumer energy data, and the associated approach to data transfer; and
- section 6 discusses implementation of a CDR in the energy sector, and next steps.

The appendix lists the consultation undertaken and submissions we have received in response to a discussion paper on facilitating access to consumers' energy data.¹⁰

¹⁰ The discussion paper can be found at <http://www.coaenergycouncil.gov.au/publications/call-submissions-facilitating-access-consumer-energy-data>.

2. How will the Consumer Data Right regulatory framework apply to the energy sector?

This section sets out how the CDR regulatory framework applies to the energy sector, once a dataset has been designated as being subject to a CDR.

2.1 Overview of the Consumer Data Right regulatory framework

The Australian government is creating a new right for consumers – a Consumer Data Right (CDR).¹¹ The CDR will give consumers the right to safely access certain data about them held by businesses. They will also be able to direct a business to transfer this data to a trusted, accredited third-party of their choice.

The purpose of the CDR is to benefit consumers by providing access to data about them, to help them to make informed choices about the purchase of goods or services, from participants within a relevant market. It follows that the focus of the CDR is on empowering consumers through access to their data, while simultaneously protecting the privacy of their data.

The CDR is proposed to be introduced first to the banking sector, with other sectors following as consumer datasets are identified and evaluated. The government has indicated that it expects consumer datasets in the energy and telecommunications sectors are priorities for applying a CDR, with other sectors following over time.

The CDR regulatory framework sets out the arrangements for the governance of the CDR, and the process for determining those datasets to be designated as being subject to a CDR. Specifically, the CDR regulatory framework:

- gives the Australian Competition and Consumer Commission (ACCC) the role of the CDR regulator, responsible for providing advice to the Treasurer as to whether to designate a sector and consumer datasets as being subject to the CDR, and developing general CDR rules, taking into account advice from sector specific regulators and other stakeholders;
- provides for Data61 to be the CDR standards body, to determine the technical standards associated with the transfer of data that designated datasets and associated designated data providers must follow;
- provides general and sector specific rules for accrediting third-party data seekers, accessing data, and managing complaints processes, amongst other things;
- provides enhanced privacy and information security protections;
- provides a tiered accreditation model where data seekers need to become accredited before they can receive the data:
 - > datasets are to be assessed as being higher or lower risk based on the harm that may arise if there were unauthorised access to the data; and
 - > third-party consumer data recipients are to be accredited to receive either low risk data or both high and low risk data;
- data recipients would need to obtain the explicit agreement of consumers prior to receiving consumer data; and
- accreditation by third-party consumer data recipients would apply to all consumer datasets that have been designated with the appropriate risk status. For example, data recipients accredited to receive high risk consumer data, would be able to access consumer data designated as being high risk, irrespective of the sector that the data relates.

¹¹ The Treasury, *Review into Open Banking*, December 2017, page 3.

The CDR will be implemented via amendments to the *Competition and Consumer Act 2010*, and the *Privacy Act 1988*.

2.2 Relationship between the CDR and existing data rights in the energy sector

Since 6 November 2014 the energy sector has had an existing right to access consumer electricity metering data.¹² The objective of the right is to make it easier for customers to access their electricity data and obtain services from authorised third parties using consumer data, thereby allowing consumers to make better and more informed choices about energy products and services as well as save electricity costs.

The right:

- allows customers and authorised third parties to obtain their electricity metering data from distribution network service providers (DNSPs) and retailers;
- allows small customers to access historical billing data for the previous two years;¹³
- allows customers to access gas metering data from gas distributors;¹⁴ and
- requires retailers and DNSPs to comply with minimum requirements related to the format, timeframes and reasonable charges when providing the data.

To facilitate access to electricity metering data, the Australian Energy Market Operator (AEMO) has developed metering data provision procedures. This established the minimum requirements for the manner and form in which retailers and DNSPs must provide metering data to a consumer, or their authorised representative. These procedures, developed in consultation with industry, gave some flexibility to DNSPs and retailers about elements of the process, which in turn has led to some inconsistency in application.

The CDR will expand upon the existing energy data right and provides a more comprehensive regulatory framework to facilitate access by third parties. This will address several concerns that have been raised about how the existing energy data right has facilitated the development of third-party services to consumers – Box 1.

Box 1: Concerns about the existing consumer data right in the energy sector

The Independent Review into the Future Security of the National Electricity Market (known as the Finkel review) recognised that improving access to consumer energy data is key to consumer empowerment.

Despite the introduction of a right to access electricity data, several additional impediments to accessing consumers' electricity data have been identified. For example:

- the Finkel review recommended that the COAG Energy Council facilitate measures to remove complexities and improve consumers' access to, and rights to share, their energy data.¹⁵
- the ACCC Retail Electricity Pricing Inquiry¹⁶, raised data access as one of the obstacles to good consumer outcomes, saying that “there are barriers to consumers accessing information about their electricity usage and using this information to compare and choose an offer.”; and

¹² Rule 56A and 56B, NERR, and NER 7.15.5(d).

¹³ NERR, 28.

¹⁴ NERR, 86B.

¹⁵ Commonwealth of Australia, *Independent Review into the Future Security of the National Electricity Market: Blueprint for the Future*, June 2017, page 143.

¹⁶ Australian Competition and Consumer Commission, (2017), *Retail electricity pricing inquiry: Preliminary report*, 22 September.

- a joint report from the Climate Change Authority (CCA) and Australian Energy Market Commission (AEMC)¹⁷ on delivering affordable, secure and lower emissions generation also recognised that consumer electricity data would be important for developing demand management services.

Given these concerns, the COAG Energy Council committed to facilitate the development of innovative services and to inform consumers when making purchase decisions, through improved access to consumer data.

Retailers also made a related commitment during roundtable discussions with the Prime Minister, where they agreed to provide feedback on progressing a number of matters including “implementation of a right to data and technologies for using QR codes and similar online comparisons.”

In response to our discussion paper, stakeholders indicated that there was a need to intervene in the sector to facilitate third-party access to data – Box 2. Indeed, stakeholders were broadly supportive of ensuring that any framework to achieve this was aligned to the recommendations being proposed in the Review into Open Banking.

Box 2: The need to improve existing arrangements – feedback from stakeholders

Most stakeholders supported the need to address impediments to consumer data access by third parties. Several stakeholders noted the cumbersome nature of existing arrangements. For example, the Clean Energy Council indicated that:¹⁸

The current framework for access to consumer data is slow and cumbersome and this is a significant barrier to improving energy services for consumers. The data access scheme would dramatically improve the ability to design PV systems that are sized appropriately for the customer’s load profile.

Similarly, AGL Energy:¹⁹

...strongly supports the principle that consumers should have greater access to and control over data that directly relates to them. We consider that a well-designed regulatory regime should facilitate this access and control to allow customers to seek value from their data, while also preserving incentives for efficient investment and innovation in data from businesses, and fostering trust from the community in data use and privacy.

EnerNOC highlights that:²⁰

...in order to obtain customer meter data, EnerNOC is required to engage with several MDPs, distributors and retailers who have varying processes for verification and consent. From EnerNOC’s perspective, the requirement to satisfy different processes and obligations for each is certainly an impediment to third party access to consumers’ data.

Specifically, the CDR applying to the energy sector:

- clarifies the governance and privacy arrangements associated with third-party access to consumer energy data;
- provides a framework for deciding which energy consumer datasets should be subject to a right of access;
- addresses concerns about privacy risks and liabilities; and

¹⁷ Climate Change Authority, and Australian Energy Market Commission, (2017), *Towards the next generation: Delivering affordable, secure and lower emissions power*, June.

¹⁸ Clean Energy Council, (2018), Submission to the Treasury Review into Open Banking and the Department of Energy and Environment discussion paper, facilitating access to consumer electricity data., page 1.

¹⁹ AGL Energy, (2018), Submission to the discussion paper on facilitating access to consumer energy data, page 1.

²⁰ EnerNOC, (2018), Response to HoustonKemp’s draft report *Facilitating access to consumer electricity data*, page 5.

- facilitates the standardisation of technical requirements to facilitate access to data by accredited third parties.

While there is some overlap between the CDR and the existing data right, we anticipate that there is merit in retaining the existing electricity metering data right for consumers accessing their own data, which is currently placed on electricity distributors and retailers, and gas distributors. It is proposed that this will remain the regulatory mechanism for consumers to access their own energy metering data.

That said, we expect that the obligation on distributors and retailers to provide access to metering data to authorised third parties will become redundant with the creation of a CDR. It follows that there is merit in removing that part of the obligation on distributors and retailers from the NERs and the NERRs once the CDR has been implemented.

Finally, the CDR is principally focused on facilitating access to consumers' energy data by authorised and accredited third parties. It follows that as consumer energy datasets attract a CDR over time, this will allow authorised and accredited third parties to access this data on behalf of a consumer.

It is currently unclear how the CDR framework will be applied for consumers wanting to directly access designated consumer datasets for which they otherwise do not have a right of access. Should it be considered appropriate for consumers to directly access these additional consumer energy datasets from a designated data provider, then this right could be created by changes to the NERs or NERRs, as appropriate. Alternatively, authorised and accredited third-party service providers could provide the data directly to the consumer should this be demanded.

2.3 Role of the regulators under the CDR regulatory framework

The CDR regulatory framework allocates roles to the ACCC, the Office of the Australian Information Commissioner (OAIC) and Data61. This section describes their roles under the CDR regulatory framework, and the roles that AEMO and the AER should also have under the CDR regulatory framework.

2.3.1 Role of the Australian Competition and Consumer Commission and the Office of the Australian Information Commissioner

Under the CDR regulatory framework, the ACCC and the OAIC act as dual regulators. The ACCC is the lead regulator and the OAIC's role is to ensure that consumer's privacy is properly protected.

Specifically, the ACCC is responsible for:

- writing CDR rules in consultation with OAIC and other sector regulators. This is to ensure consistency across sectors. It is envisaged that there will be a general set of rules applying to all sectors, with sector specific modifications to the rules as required on a case-by-case basis;
- setting out the criteria and process for accreditation by third-party data access seekers;
- maintaining a public registry of who is accredited to access energy datasets subject to a CDR; and
- checking for compliance with the CDR rules, and enforcement.

The OAIC will act as the privacy regulator under the CDR regulatory framework by:

- retaining responsibility for consumer privacy protection, in line with the *Privacy Act* and other relevant rules; and
- acting in an advisory role on the development of the CDR rules, to be developed by the ACCC.

Both the ACCC and OAIC, will be empowered to audit consent processes to ensure that fraudulent access to consumer's data had not been obtained. In addition, they would be responsible for enforcing compliance with the regulatory framework, including removing accreditation and access rights.

2.3.2 Role of Data61, as the Data Standards Body

The CDR framework involves the creation of a new Data Standards Body to be overseen by the ACCC, and with the input of appropriate sector specific entities. The government has announced that Data61 will be given the responsibility for being the Data Standards Body for the CDR.²¹ The OAIC would certify that the energy data standards are compliant with the *Privacy Act*.

The AEMO data technical working group has effectively undertaken this role in the energy sector, and has representatives of relevant parties. It could provide appropriate industry specific guidance to Data61, as required. This would allow for the leveraging of pre-existing dataset standards used in the sector to reduce duplication and costs.

Data61 would specify the way in which data seekers and data providers should connect and how they can be compliant with the rules. The standards would likely include:

- transfer standards – to enable uniform transfer methods, processes, and practices;
- data standards – specifications by which data are described and recorded to provide data integrity, accuracy and consistency, clarify ambiguous meanings, minimise redundant data, and document business processes; and
- security standards – techniques to protect the cyber environment of a user or organisation. This environment includes users themselves, networks, devices, software, processes, information in storage, applications, services, and systems.

We would expect that in developing energy data standards, the new data standards will balance the need for consistency across sectors, with the benefits of consistency with existing data standards applying in the energy sector, as developed by AEMO.

2.3.3 Role of the Australian Energy Market Operator and the Australian Energy Regulator

The CDR regulatory framework envisages that other regulators and stakeholders would have an opportunity to provide input to the development of the CDR rules. It follows that the AER and AEMO are likely to have specific insights based on their relevant sectorial expertise on how those rules should be appropriately framed for the energy sector.

In addition, we believe there is merit in AEMO using its work group framework to commence working in collaboration with the ACCC, Data61 and others in the development of the general CDR rules and data standards. This will ensure that the rules and standards are appropriate for consumer energy datasets.

The AER and AEMO should also play a role in:

- providing advice on the likely privacy risks associated with consumer energy datasets being considered for application of a CDR; and
- identifying and recommending datasets that should be subject to a CDR.

Recommendation 1: The COAG Energy Council should direct the Australian Energy Market Operator to commence working in collaboration with the Australian Competition and Consumer Commission, Data61 and other stakeholders to develop the Consumer Data Right rules and data standards, to ensure that the rules and standards are appropriate for consumer energy datasets.

²¹ See, <http://sjm.ministers.treasury.gov.au/media-release/049-2018/>.

2.4 Proposed framework for accessing consumer energy data

Under the CDR regulatory framework, it is envisaged that third-party access seekers would need to be accredited in accordance with criteria and a process developed and administered by the ACCC.

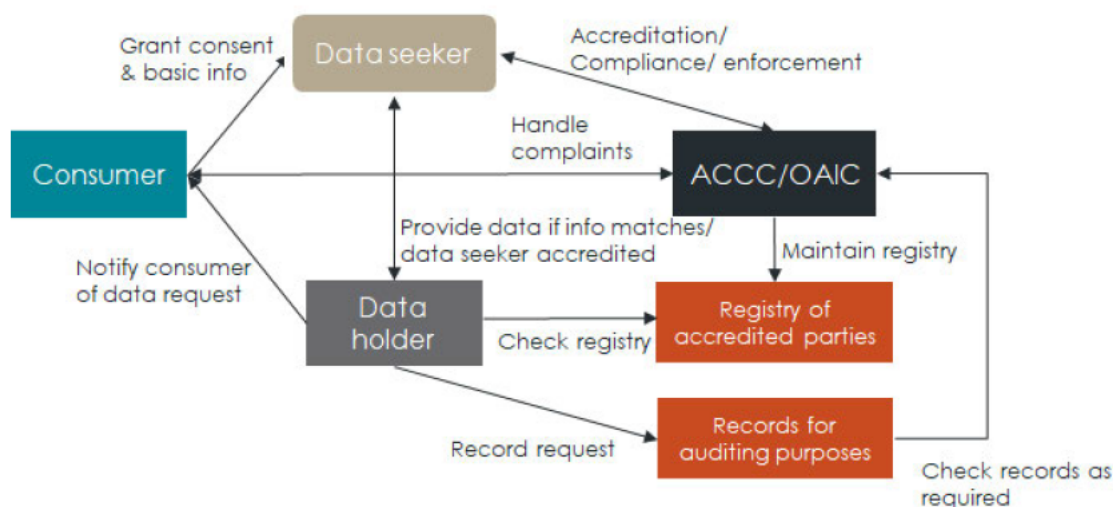
To facilitate the development of the CDR, registered energy market participants that currently access data within the existing data sharing arrangements should be immediately accredited for access to consumer energy data. Any other parties seeking access to consumer energy data, or future datasets subject to the CDR, will need to seek and be granted accreditation in accordance with the processes to be established by the ACCC.

The process for accessing consumer energy data subject to a CDR, would likely be as follows:

- a third-party data seeker would:
 - > seek accreditation prior to requesting data which would require it to comply with (amongst other things) a process for:
 - collecting and retaining consumer identity and authorisation information; and
 - providing consumers with easy to understand/tailored options, so consumer consent is explicit and fully informed;
- consumers wishing to provide a third-party with access to their data would:
 - > provide explicit, fully informed consent in a form that is clear as to the purpose for which the data is to be used, or is not to be used; and
 - > provide basic information about themselves (eg, customer name, account number, NMI, dwelling address, etc) to the data seeker for the purpose of basic verification of identify for the relevant data to be provided;
- upon receiving a request to access a consumer's energy data, the data provider would:
 - undertake basic verification of the consumer information provided;
 - check the ACCC's register to ensure that the data seeker is accredited;
 - provide the consumer's energy data in accordance with the rules and technical standards; and
 - notify the consumer and the regulators that information was requested or provided;
- the ACCC/ OAIC would be responsible for:
 - > handling consumer complaints about data access;
 - > maintaining a register of accredited third-party data seekers, and the datasets to which they have access; and
 - > undertaking audits to ensure that data seekers have obtained the appropriate consent from the consumers and enforcing compliance processes

The energy data access framework under the CDR is summarised in Figure 1 below.

Figure 1: Overview of the open energy data access framework



Relevantly, this proposed framework differs from that outlined for accessing banking data due to not requiring a data seeker to give the data provider evidence of explicit informed consent before or at the time that the data is being requested (ie, the keeping of records for auditing purposes). We discuss our reasoning for this proposed approach in greater detail in section 4.2.

This proposed approach reflects the lack of a pre-existing platform for consumer consent to be readily provided. It follows that we believe that an ex-post auditing framework to ensure that explicit consent has been obtained, should be sufficient for the provision of data in the energy sector.

Recommendation 2: The COAG Energy Council request that registered market participants in the National Electricity Market be recognised as accredited parties to access consumer energy data subject to a Consumer Data Right.

3. Which energy consumer datasets should be designated for a CDR?

An important question is what datasets should a CDR be applied to in the energy sector? Currently, consumers have a right to authorise a third-party representative to access only their electricity metering data.

In this section we first set out the considerations that we believe are relevant for determining whether to designate a consumer data set to be subject to a CDR. This is followed by a brief description of the consumer datasets available in the energy sector, the possible uses for the data, and our evaluation of whether they should be designated as a dataset subject to a CDR.

3.1 Considerations in determining whether a CDR should be applied to a consumer dataset

We believe that a decision as to whether to subject a consumer dataset to a CDR requires consideration of several matters, namely:

- whether the consumer dataset supports a use case that promotes the interests of consumers;
- the availability or need to include in the dataset other data to support the use case; and
- the ease with which, and so costs, of providing the data in accordance with the CDR technical standards.

The starting point is to be clear as to the use case for providing access to the consumer data. The use case needs to materially promote the interests of the consumer, through say facilitating improved information to support decision making or promote competition within a market. Relevantly, we do not believe that a formal benefit estimation is required, as the difficulty in undertaking such an exercise in the case of improving the availability of data is unlikely to be informative for a decision to apply a CDR to the dataset.

The second consideration requires a consideration of the availability, or lack thereof, of access to other data that might be needed to support the use case. Such data may or may not be considered consumer related data. Should such additional data not be available, then this might be a sufficient reason to support not applying a CDR to the consumer dataset and so avoids the costs that might otherwise be incurred to make the data available.

The final consideration is an evaluation of the ease of which, and so costs, of providing the data. For consumer data that is readily shared, stored and used by data providers, then we anticipate that the costs of complying with the technical standards will not outweigh the public interest from making the data available. That said, consumer data that is not readily stored or used digitally, and so would lead to the incurrence of substantial costs to meet the data transfer technical standards, might lead to the data not being subjected to a CDR.

Ultimately, the weighing of the public interest versus the costs will need to be based on the judgement of the ACCC making a recommendation to the Treasurer to designate an identified consumer dataset as being subject to the CDR.

3.2 What types of data are collected and could be part of a Consumer Data Right?

Conventional consumer related energy data can be grouped into four main categories, comprising of:

- customer related data, such as name of account holder, contact details and time period of account;

- standing data, such as the NMI, supply address, meter type, and details on solar panel and battery installation;
- metering data, such as accumulated consumption, consumption by time interval, voltage and frequency for electricity, and consumption by time interval for gas; and
- pricing data, such as retail and network tariff, total bill, and other fees and charges.

3.2.1 Customer related data

Customer related data is collected by retailers when a consumer first signs up with a retailer. Retailers share this information with distributors in case distributors need to make emergency contact with the account holder. We understand that distributors record information on the current account holders but do not necessarily hold information on previous account holders or when the account was created.

In principle, a data provider under the CDR framework will need access to customer related data for the purpose of undertaking the necessary verification of identity of a consumer, who is authorising an accredited third-party to access consumer energy data subject to a CDR. However, it would not be appropriate for this data to be itself subject to a CDR and provided to an authorised and accredited third party. This is because the information should already be available to the accredited third-party directly from the consumer they are servicing.

3.2.2 Standing data

Standing data is information related to the connection point and is relatively static over time. Relevant information includes the supply address, meter types installed, and capacity of solar panels and batteries where relevant. Meter related data, including supply address, meter type and time installed, is collected by metering providers, and shared with other market participants via MSATS procedures.

The Clean Energy Regulator collects basic information on solar panel installations. Currently, no one is responsible for collecting information on battery installations but procedures to share this information are currently being developed. The AEMC is currently considering a rule change proposed by the COAG Energy Council to develop a distributed energy register, which will provide improved information about consumers' distributed energy installations.²²

We expect that standing data will be an important consumer dataset for providing advice to consumers about additional energy installations, energy efficiency opportunities, as well as in providing advice on retail pricing offers. To the extent that standing data is readily available then it should, in principle, be subject to a CDR. As this information becomes more readily available in the market over time, then additional connection point datasets are likely to also be warranted for inclusion in the set of consumer energy datasets subject to a CDR.

3.2.3 Metering data

Meter data providers are responsible for collecting metering data following the AEMO meter procedures. Metering data is then shared with other market participants via AEMO's B2B information hub and is used for market settlement and billing, amongst other purposes. However, information on frequency or voltage is not collected as part of this process as this is useful mostly for network management purposes.

Metering data is already subject to a right of access in the NERs, and so should also be subject to a CDR.

We are currently unaware of particular consumer use cases to warrant the inclusion of frequency or voltage datasets as being subject to a CDR. That said, to the extent that consumer use cases are identified in the future, then frequency or voltage datasets could at some point become subject to a CDR.

²² COAG Energy Council, (2017), Rule change request to establish a register of distributed energy resources, 5 October.

3.2.4 Pricing and billing data

Retailers are responsible for calculating the tariffs and charges that are applicable for a consumer and sending this as a bill to a consumer. Retailers publish the tariffs they offer to consumers on their website, and current tariff offers must be provided to the AER for publishing on the Energy Made Easy comparison website. Retail product offers are also made available via other tariff comparison websites, but may not include all available market offers.

The offer that a retailer makes to an individual consumer will vary depending on the jurisdiction and network area of the address, as well as the meter type installed at the house. Retailers also commonly provide consumers with discounts for on-time payment and for the bundling of gas and electricity supply. Because of these billing complexities, we understand that there are around 4,000 to 5,000 generally available market offers that are currently available. The AER is working to create plan IDs that cover generally available market offers but we understand that this does not include 'special' tariffs, eg, staff discounts or legacy tariffs.

The actual retail tariff offer that a consumer is currently assigned to may differ from offers that are generally available at a given time. This reflects changing product offerings, and so a consumer may be on a legacy tariff. It follows that the actual number of tariffs that exist could be significantly more than the number of generally available tariffs. Retailers are obliged to disclosure relevant charges on a consumer's electricity bill but this information is not shared with other market participants.

Current pricing and historic billing data for a consumer is important information to ensure that correct comparisons are made for a consumer. While there are potentially other avenues for obtaining this information for a consumer (eg, via recent bills and other tariff product sources), there is the potential for error and it likely affects the scope to provide on-demand services to a consumer by a third-party. For these reasons, we believe that retail tariff product data should, in principle, be included in the consumer energy dataset subject to a CDR. In addition, there may be a need also to designate historic billing data for a consumer. This should be considered further by the ACCC.

3.3 Possible uses for consumer energy data

Consumer energy data are essential information to tailor services to consumers, and facilitate better consumer decision making and energy market competition. These can include:

- energy management services;
- services that assist households and/or businesses to determine whether to invest in energy storage and solar PV systems; and
- the provision of tailored retail market offer comparisons.

Currently, third-party data service providers can only access electricity metering data. To undertake many of these use cases there is also a need to access gas metering data, and data on the retail products being used by the consumer.

Importantly, each of these use cases can be expected to promote competition in electricity and gas retailing, as well as the provision of the third-party value-added services themselves.

3.4 Cost of providing different types of data

The cost of sharing consumer energy data will depend on the nature of the data:

- data that is already collected and shared among market participants, eg, metering and standing data is likely to be more cost effectively provided under a CDR; and

- data that is collected by an organisation but not shared with other market participants, eg, retail tariffs and other meter data such as frequency and voltage, is likely to be less cost effectively provided under a CDR.

Data that is currently shared amongst market participants would follow standard definitions and sharing procedures. Given this, the data should be relatively low cost and easy to share.

Data that is collected but not currently shared among market participants would likely involve a higher cost to provide to third-party participants. This is because standard definitions would need to be developed so that the information is machine readable and firms may not have the necessarily infrastructure to share this information on an on-demand basis. That said, the materiality of providing the data for the identified use case, will be an important consideration when evaluating the costs associated with making the data accessible.

3.5 Designation of consumer datasets in the energy sector

Given there is an existing consumer data right for authorised consumer representatives for electricity metering data in the National Electricity Market (NEM), we recommend that the Treasurer immediately designate electricity metering data as being subject to the CDR. For clarity, we do not believe it is necessary for the ACCC to undertake a separate assessment to consider whether electricity metering data attract a CDR in the NEM. The relevant dataset to which the CDR applies should be electricity metering data, in line with current data access rights.

We note that in the context of the Open Banking Review, it has been acknowledged that accessing information on banking products is also important for the promotion of competition.²³ It was acknowledged that information on retail banking product prices, fees and charges are required by legislation to be disclosed. However:

...the way that information is currently presented and the high degree of variability between competing products makes it difficult for customers to compare available product offerings.

It is for this reason that retail banking product prices, fees and charges have been recommended for inclusion in the dataset subject to a CDR in the banking sector.²⁴ In essence, such information is needed to deliver benefits to consumers by facilitating banking competition.

The problem identified in the Open Banking Review about the complexity and variability of banking retail products also arises in the energy sector, where there is a myriad of retail product offerings that make comparisons difficult. It follows that there is a strong case for applying a CDR to retail electricity and gas product offerings in addition to metering data.

The final dataset that is relevant to the use cases identified earlier, is gas metering data. This data is not currently subject to a right for a consumer to authorise third-party access. However, it is needed to allow proper comparisons of energy market offers for those consumers using both electricity and gas retail products.

Finally, electricity metering data is not currently subject to a consumer right to access outside of the NEM, ie in the Northern Territory and Western Australia. In principle, the CDR should be extended to facilitate consumer benefits in those locations. That said, there may be lower benefits from accessing data in markets such as the Northern Territory where retail competition is less effective compared to the NEM.

To achieve the goals of the CDR in the energy sector, we recommend that energy retail product offerings, gas metering data and electricity metering data outside of the NEM be designated as being subject to a

²³ The Treasury, *Review into Open Banking*, December 2017, page 40.

²⁴ Ibid, Recommendation 3.6.

CDR. However, there are likely to be a number of complexities involved in making this data available under the CDR framework. It follows that we also recommend that the timeframe within which these datasets become available be staged, to facilitate the provision of the necessary data transfer mechanisms for these additional datasets.

Recommendation 3: The COAG Energy Council request that the Treasurer immediately designate electricity metering data as attracting a Consumer Data Right in the National Electricity Market.

Recommendation 4: The COAG Energy Council request that the Treasurer designate NMI standing data, retail gas metering data, electricity and gas retail product (pricing) data, and electricity metering data outside of the National Electricity Market to be made effective no later than June 2020.

4. Applying the CDR regulatory framework to the energy sector

This section describes how the CDR regulatory framework might be best applied to the energy sector, with a particular focus on the rules and standards that should be applied. The responsibility for developing the CDR regulatory framework including the rules for third-party accreditation and the approach to verification of consumer identity and consent, is ultimately a matter for the ACCC. This section should therefore be treated as the provision of advice to the ACCC, based on our experience in the energy sector, and information obtained from stakeholder consultation and submissions over the course of our project.

It follows that in considering the proposed options for applying the CDR regulatory framework to the energy sector, we have considered stakeholder submissions on our proposed energy data regulatory framework, as well as the requirements for the CDR regulatory framework.

We understand that there are likely to be a number of working groups established as part of the development of the technical standards and regulatory framework to establish the CDR, initially for the banking sector. We have recommended earlier that AEMO and other relevant energy sector stakeholders be involved in those working groups, to ensure that the rules and standards can be appropriately applied to the energy sector.

4.1 Proposed objective for the CDR rules applying to consumer energy data

Given the changes occurring in the electricity sector, there is a need for consumers to have easy access to their electricity data, to assist in evaluating the potential benefits of investments in new technologies (eg, the size and type of solar PV or battery systems, or other energy efficiency technologies), alternative tariff products and offers (eg, such as time-of-use tariff offers using their own load profiles), or to directly manage electricity use to lower bills.

While consumers in the NEM have a right to access electricity metering data, for this data to be both useful and accessible it is important also to ensure that:

- consumers have the information they need to make informed decisions;
- consumer privacy is protected and any risks associated with the release of data are managed; and
- data is provided in a format and via technology that delivers the information in an easy-to-use, cost effective and timely manner.

These considerations are also aligned with the principles developed as part of the Open Banking Review, which are to create a framework that:

- is customer focussed;
- promotes competition;
- encourages innovation; and
- is efficient and fair

Given the above, the proposed objective for the CDR rules as it relates to consumer energy data is:

To facilitate on-demand access by a consumer's authorised accredited representative to consumer energy datasets in a manner that promotes the long-term interests of consumers.

The key elements of the objective are:

- the facilitation of on-demand access, to ensure that third-party data providers are able to immediately respond to consumers' requests for their services. This acknowledges that many data related services are likely to be most valued by consumers at the point when they are making a decision or investigating options about energy product offerings;
- by a consumer's authorised accredited representative, to acknowledge the importance of an accredited representative being authorised by the consumer to provide advice;
- to consumer energy datasets, which is intended to encompass both the customer's current right of access to data that is collected via a customer's meter (ie, metering data), and other consumer electricity or gas data that might be needed to facilitate the provision of innovative value-added services to consumers; and
- promote the long-term interests of consumers encompasses the technology and innovation will likely change over time. The long-term interest would also include privacy and consent, so that appropriate safe guards are in place to manage consumer privacy.

Importantly, the CDR framework is unclear in terms of its application to consumers wanting to access their own data directly. We believe that it is important for the CDR framework to be clearer about how it is to be applied to consumers accessing data directly. In the context of the energy sector, this is likely to include different requirements for the verification of identity when consumers are seeking direct access to data.

Alternatively, the NERs could be changed to provide specific rights to consumers of datasets that become designated by the CDR, over time. However, this would not address the problem of consumers outside of the NEM having a right to access their own data.

Finally, stakeholders were strongly supportive of the proposed objective for the consumer energy data scheme as outlined in our discussion paper. The Consumer Action Law Centre indicated that it:²⁵

...supports the objective, noting that the need for immediate access to accurate, reliable data at the point at which a consumer is making a product choice (or an authorised representative is identifying a choice for them) is imperative. At the same time, this creates a tension with the need to ensure privacy obligations are respected,... We further note (as the paper does) that access to historical data is essential for consumers to make truly informed decisions.

Recommendation 5: The objective for the Consumer Data Right rules as it relates to consumer energy data should be 'to facilitate on-demand access by a consumer's authorised accredited representative to consumer energy datasets in a manner that promotes the long-term interests of consumers.'

Recommendation 6: Consideration should be given to clarifying how the Consumer Data Right framework is applied to provide consumers with a right to directly access any consumer energy dataset subject to the Consumer Data Right from a designated data provider.

4.2 Verification of consent procedures

A key difference between the proposed rules for the CDR in the banking sector, and our proposed framework for energy data is the procedures for the verification of consent by a consumer for a third-party data seeker to access the consumer's electricity data. These procedures need to balance privacy concerns and the risk of fraudulent use of consumers' energy data, with the need to provide on-demand access to the data by an authorised and accredited third-party.

²⁵ Consumer Action Law Centre, (2018), Submission to the discussion paper on facilitating access to consumer energy data, page 2.

This section sets out our thoughts as to procedures that we believe would strike an appropriate balance between privacy risks and facilitating access to data. They are provided for the consideration of the ACCC in the development of the CDR rules.

We commence by briefly discussing the current arrangements for obtaining verification of customer consent to energy data, and a proposed procedure for verification of consumer authorisation.

4.2.1 The current approach to verification of consent under the NERs data obligation

The current approach to verification of consumer authorisation places the obligation on retailers and DNSPs to fulfil their *Privacy Act* obligations. Given the lack of additional guidance as to how these obligations can be fulfilled, these processes differ substantially between DNSPs and retailers. However, in general a third-party seeking access to a consumer's electricity data is currently required to provide some or all of:

- the customer's details, such as name, date of birth etc;
- the account details, such as account number, physical address of the property, and the national meter identifier (NMI);
- contact details of the primary account holder, such as an email or phone number; and
- the period of time over which data is being sought.

The retailer or DNSP uses this information to ensure that the customer and account relates to the property for which data is being sought, and for the period of time over which the data is being sought.²⁶ Once the identity of the account holder has been verified for a particular NMI, the second stage is to verify that the account holder has provided consent to the third-party representative.

This typically requires the provision of additional information, which can include one or more of:

- a signed consent form or some other written proof of authorisation;
- information on the third-party company acting as a representative of the consumer; and
- a contact person at the company.

We understand that DNSPs and retailers typically require the signed consent form to be provided by email.

The current approach to verification of consent is inconsistent with a desire to provide on-demand data to the third-party. This reflects the practical inability of verifying proof of consent at the time of requesting and providing data, without some time delay. It follows that changes would need to be made to current arrangements to satisfy the objective for the CDR applying to consumer energy data.

4.2.2 A proposed approach to consent and verification in the energy sector

While the CDR framework confers on the ACCC the ultimate responsibility for determining appropriate and safe identity verification and consent arrangements for a given sector, the Open Banking Review outlines a redirect or reroute approach for verifying that a consumer has provided consent for a third-party to access consumer banking data. This approach requires a consumer to effectively log into their bank account to verify their identity, and provide explicit consent for a third-party to access their data. Such a solution relies on the existence of online consumer accounts, which are not as prevalent in the energy sector. The need to log into the banking account reduces the chance of identify fraud, given the safeguards banks have in place to prevent online banking fraud.

²⁶ We understand that it is currently difficult for a distributor to determine the time period over which a current customer can legitimately authorise data access for a given NMI. This is because distributors typically do not keep records of when a customer moved into a premise, or become the account holder for a particular NMI.

However, we do not think this approach is practicable for verifying consumer consent in the energy sector because:

- online accounts are not as common for energy sector consumers;
- consumers are likely to have far less interactions with their online accounts (where these are available) in the energy sector, meaning that remembering passwords and account names will more likely be problematic and create another barrier to consumers seeking their data;
- energy sector data is also likely to have lower privacy risks than banking data, and so requiring the development of online energy accounts to provide consent for data access, is likely to be expensive relative to the risks; and
- the need to ensure the ease of providing consent to facilitate the development of third-party energy services.

In the absence of easy electronic verification of customer identity and authorisation at the point of a data request (say, via customer identity management through a retailer portal), there is a need for an alternative approach. In our opinion, in the energy sector it is possible to require data seekers to seek explicit consent from consumers with stringent record keeping and audit requirements, and associated penalties to provide incentives to minimise fraudulent activity.

This approach allows for a data provider to presume that a data seeker has obtained the necessary consumer consent at the time that a data request is made.

The proposed process for accreditation and management of consumer consent relies on an ex-post audit process with associated penalties for non-compliance, instead of requiring the verification of identity and consent at the time of each data request.

More specifically, this would involve:

- explicit and informed consent from consumers, with ex-post checking;²⁷
- basic information as a way of providing simple verification of the consumer's identity, which also enables the data provider to provide the right data for that consumer; and
- checks put in place to ensure that consent has been provided, including requirements for record keeping and post audit.

We also believe that the process of verifying consent by a consumer should be not more burdensome than if the consumer were to ask a data provider directly for the data.

Explicit consent from the consumer with post check audits

To ensure that a consumer is clear as to how data is to be used, we believe that the consumer should provide explicit consent to the third-party to access the consumer's data. Consistent with the proposed consent requirements for accessing banking data, this would require that:

- a consumer be presented with an easy to understand, single screenshot or one-page summary, which outlines what the consumer is consenting to;
- consumers be given control over what access they wish to provide (eg, an ability to opt-out of certain uses, and provide a timeframe for data usage, ie, one off, for a defined time period, or ongoing) and be able to cancel access as required; and
- be notified when data is accessed by the third-party.

²⁷ The Public Interest Advocacy Centre highlights in their submission in response to the discussion paper, the importance of having an obligation on third parties to obtain explicit informed consent. See Public Interest Advocacy Centre, (2018), Submission to facilitating access to consumer electricity data, page 3.

To prevent delays in the provision of data, data seekers will need to keep sufficiently detailed records of consent, that demonstrates it has obtained the appropriate consent, ie, data seekers may need to follow certain guidelines.

These records could include:

- evidence that it has provided consumers with a simple and explicit summary of what the consumer is consenting to;
- transparent options to let consumers decide on what data to share, for what purpose, for how long and frequency etc; and
- recorded consent by verbal means or digitally by checking the agreement button; or
- sending email correspondence to the consumer and recording a return email acknowledging consent.

To ensure compliance with the consent obligations, the ACCC will have the power to audit a data seeker's records of consent, processes and procedures. This would be a condition of accreditation by a third-party data seeker, with appropriate penalties for non-compliance.

Data providers will also be required to notify consumers when their data have been accessed or requested, which should also help to prevent data seekers from accessing data fraudulently.

Information required for verification of identity

To gain access to a consumer's electricity data, an accredited third-party would need to provide additional information, such as the customer's name, address and NMI. This ensures that the accredited third-party can assure itself that it is dealing with the appropriate account holder for the premise for which data is being sought. At a minimum, the third-party would need to provide sufficient information for the data provider to identify the relevant meter for which data is being sought, eg, NMI or address.

Additional information could be provided when an authorised third-party asks for data to check if consent has been provided. The additional information would need to be machine-readable to enable the provision of data on an on-demand basis. One possibility is to ask third parties to provide information that is currently used to verify identity when a third-party is asking for the data, eg, account number, customer name, address, and phone number etc. However, anecdotal information suggests that retailers and distributors currently have difficulty matching the information on record and provided by the customer, eg, address could be written in a different format (st versus street) and a customer could provide a different number than that provided on their official record.

Ultimately, there is a trade-off between ease-of-use and protecting the privacy of consumers, ie, the more data for identity verification provided, the less likelihood of fraudulent access but it is also more cumbersome for consumers to satisfy, which can lead to delays in accessing data. That said, we acknowledge that energy data is likely to be inherently of lower privacy risk compared to consumer banking datasets. The key question for the ACCC to consider is what approach to identity verification would represent reasonable steps from a legal and useability perspectives.

In our opinion, an alternative approach would be to verify identity based on information that is easier to match, but which is most likely to be only known by the account holder for whom an accredited third party is seeking data. At a minimum this would include information readily accessible on a consumer's retail electricity bill, namely account number, surname and postcode. We recommend that this be the starting point for the ACCC considering data to be used for identity verification, as we believe providing this information is a reasonable step for identity verification from both legal and useability perspectives.

Protecting at risk consumers

Several stakeholders have raised the need to have arrangements in place to protect at risk consumers (eg, victims of domestic violence).²⁸ Access to historic electricity data could be used to confirm patterns or trends in the location or movement of victims, thereby leading to further harm.

In our opinion, the concerns raised by stakeholders about the possibility for inappropriate use of energy data by an account holder raise important questions about whether the right to access data can be removed in certain circumstances, perhaps by a court order or if particular circumstances arise or are satisfied. Absent further information on this, we suggest that this matter be considered further by the ACCC in the context of the detailed CDR framework design. That said, these problems can arise through the existing data right, and so are not expected to be worsened through subjecting energy metering data to a CDR.

Liability framework

A comprehensive liability framework for the allocation of responsibility between participants is important for the proper functioning of the CDR.

The Productivity Commission argued that for a data sharing framework to build community trust and confidence, it is essential to embed transparent risk management practices and explicitly deal with risk and liability.²⁹ Leaving the attribution of liability to the market could result in less informed (or less powerful) parties accepting the liability risks associated with a data sharing request. For customers there is a risk that liability would be buried in a dense set of terms and conditions and therefore not readily understood and genuinely agreed. Further, a lack of clarity on liability for the failure of a participant in the CDR could discourage active participation by data holders and data recipients.

It is important that any comprehensive liability framework is principles-based, so that it can be applied consistently and to changes in circumstances. For the purpose of establishing these principles, existing liability frameworks can be drawn upon, eg, privacy law and the National Electricity Law (NEL) and NERs.

The open banking review recommended that:³⁰

A clear and comprehensive framework for the allocation of liability between participants in Open Banking should be implemented. This framework should make it clear that participants in Open Banking are liable for their own conduct, but not the conduct of other participants. To the extent possible, the liability framework should be consistent with existing legal frameworks to ensure that there is no uncertainty about the rights of customers or liability of data holders.

We believe that the liability framework applying to banking data under a CDR should also be applied to energy data under a CDR, to provide consistency in liability allocation across sectors.

Recommendation 7: The Consumer Data Right rules should not require designated energy data providers to verify that an accredited third-party data seeker has obtained explicit informed consent from consumers at the time that a data request is made. Verification of consent should be part of the third-party accreditation compliance and auditing functions of the Australian Competition and Consumer Commission.

²⁸ See submissions in response to the discussion paper from the Tasmanian Council of Social Service and Energy Consumers Australia.

²⁹ Productivity Commission, Data Availability and Use Inquiry Report, 31 March 2017.

³⁰ The Treasury, *Review into Open Banking*, December 2017, recommendation 4.9.

4.3 Managing customer complaints and enforcing compliance

The Open Banking Review acknowledged the need to establish a comprehensive system for managing customer complaints and recommends that the ACCC be given powers to enforce compliance with the rules.

The Open Banking Review recognised that there are existing internal and external dispute resolution schemes that could be used, eg, consumer complaints about privacy breaches, but there would likely be gaps with the introduction of the CDR, eg, accredited data seeker complaints about designated data providers.

Consequently, the Open Banking Review has made the following recommendations:³¹

Open Banking should have internal and external dispute resolution processes to resolve customer complaints. Amendments to the *Competition and Consumer Act 2010* should create powers to address complaints (to the extent these do not already exist) and give customers standing to seek remedy for breaches of their rights...

The Rules should create a right for accredited parties to seek remedy for breaches of the Consumer Data Right. There should also be breach-reporting obligations to the ACCC.

Similarly, consumers in the energy sector have access to external dispute resolution through energy ombudsmen as set out in state and territory legislation. These schemes typically have a wide remit to address consumer complaints in a range of areas in the energy sector, including billing complaints, payment difficulties, and concerns about the electricity network, amongst other things. These schemes already cover complaints about consumer data access under the NERs, and so are well placed to be extended to cover complaints associated with the CDR.

It follows that we recommend that the COAG Energy Council agree in principle to using existing jurisdictional energy external dispute resolution schemes for managing consumer complaints arising from the establishment of the CDR in the energy sector.

In line with the Open Banking Review's recommendations the government is proposing to give the ACCC:

- broad research and investigative powers; and
- a range of remedies to enforce the CDR, namely:
 - > directions powers for the deletion of data;
 - > powers for audit review;
 - > suspension or revocation of accreditation;
 - > financial penalties; and
 - > criminal penalties for serious breaches.

To support the proposed consent requirements within the energy sector, we recommend that:

- additional auditing/record keeping requirements than are likely to be required for accredited data seekers accessing banking data be required to access energy data, given that consent is presumed with accreditation; and
- specific penalties for breaches of the energy consumer consent requirements be developed, reflective of the risks involved.

³¹ Ibid, recommendation 2.10 and recommendation 2.11, page xiii.

Recommendation 8: The COAG Energy Council should agree in principle to using existing jurisdictional energy external dispute resolution schemes for managing consumer complaints arising from the establishment of the CDR in the energy sector.

Recommendation 9: The Consumer Data Right rules should provide additional auditing and record-keeping requirements on accredited third-party energy data seekers to ensure compliance with energy sector specific rules for verification and consent to access consumer energy data.

Recommendation 10: Specific penalties for breach of the Consumer Data Right rule requirements relating to verification of identity and consent when accessing consumer energy data should be developed to reflect the greater risks from an ex-post verification framework for accessing consumer energy data.

5. Who should be the designated data provider for consumer energy data?

The CDR regulatory framework envisages a consumer dataset and data provider being subjected to the CDR, thereby attracting the obligations to provide data in accordance with the CDR rules and standards. It follows that it is appropriate to consider which organisation should be the designated data provider for consumer energy data. We examine this question below.

5.1 Criteria for determining the designated data provider

At the time that a dataset is designated as being subject to a CDR, there is a need to also designate the data provider to whom the CDR applies. While in principle all holders of the designated dataset for a consumer could be subject to the CDR, there may be strong efficiency reasons to designate a smaller set of data providers. That said, the set of data providers could change over time as circumstances and data availability evolves.

The Open Banking Review suggests that in the context of banking, all data recipients should be obliged to comply with a customer's direction to share any data provided to them under the CDR.³² We understand that this recommendation is designed to ensure that data providers and recipients remain on a level playing field, with respect to access to consumer's information.

In our opinion, there is no equivalent need for accredited third-parties accessing consumer energy data to have reciprocal data sharing obligations for consumer energy data that they receive. Rather, a decision about who should be a designated data provider for a designated dataset should be decided by the Treasurer on a case-by-case basis, based on the recommendation of the ACCC, at the time a decision about applying a CDR is made.

In making a decision as to the party to be designated as the data provider attracting a CDR, it will be necessary to consider a number of factors. Our approach to this question has been guided by the following considerations.

1. Who has access to the dataset for any given consumer and so is capable of being considered for designation as a data provider?
2. Can the data transfer obligations arising upon designating a consumer dataset under the CDR be satisfied most cost efficiently by one or a group of entities with access to the dataset, being designated as the data provider?
3. Are there other competition or public interest reasons to require certain parties with access to the data to be designated as a data provider?

These considerations provide the basis for deciding who should be designated as a data provider for any dataset subject to a CDR.

5.2 Who has access to consumer energy datasets for any given consumer?

Electricity metering data, is currently collected by meter data providers, and shared with other market participants and AEMO, using AEMO's B2B e-hub to allow them to fulfil their roles within the market. This includes both accumulation meter data, and interval meter data. AEMO currently sets the data standards and

³² Recommendation 3.9 – reciprocal obligations in Open Banking.

formats in which this data is to be shared and has the potential to access most of the data shared between market participants via the e-hub.

Electricity retailers and distributors are both provided with metering data, which is used for billing purposes and store this data internally. AEMO also has access to metering data, to facilitate wholesale market settlement.

Based on the criteria that only those parties that have access to the relevant dataset can be designated as a data provider under the CDR, then meter data providers, retailers, distributors and AEMO would all be capable of being designated as a data provider for electricity metering data and NMI Standing Data.

Retailers are the principal holders of retail electricity and gas product data, although they are obliged to share information on current products with the AER as part of Energy Made Easy.³³ This suggests that, absent any obligations on retailers to share this data with other market participants, then retailers are likely to be the only party with access to this data.

Gas metering data is used by gas retailers and distributors for billing and network management purposes. It follows that absent any obligations to share this data with other market participants, then gas retailers and distributors could be designated as a data provider for gas metering data.

Finally, electricity metering data outside of the NEM can be accessed by the relevant retailer, distributor and market operator (eg, the Independent Market Operator in Western Australia). Any of these parties could be designated as the data provider for electricity metering data outside of the NEM.

5.3 Options for data provider of consumer electricity metering data and NMI standing data under a CDR in the NEM

We believe there are three practical options for providing electricity metering data and NMI standing data in the NEM, namely designating:

- AEMO, thereby allowing authorised and accredited data seekers a single point of access to electricity metering data and NMI standing data;
- distributors or retailers alone, which would require authorised and accredited data seekers operating across distributors to have multiple points of access to electricity metering data and NMI standing data; and
- retailers, which would require authorised and accredited data seekers to identify a consumer's retailer as well as having multiple points of access to electricity metering data and NMI standing data; and
- multiple parties, eg, distributors and retailers, which would be a maintenance of the current arrangements under the NERs.

In the remainder of this section we evaluate the likely costs of each of these options.

5.3.1 Option 1 – AEMO designated as the only data provider

The first option involves designating AEMO as the only data provider for consumer electricity metering data and NMI standing data in the NEM. AEMO would be well placed to be designated as the consumer electricity metering and NMI standing data, data provider under a CDR because:

- AEMO manages the systems for the current transfer of data and so is familiar with the practical systems and processes that would be necessary for fulfilling the likely technical requirements for providing data to accredited third parties;

³³ The product data shared with the AER is not linked to consumers and so would not allow the AER to act as a product data provider.

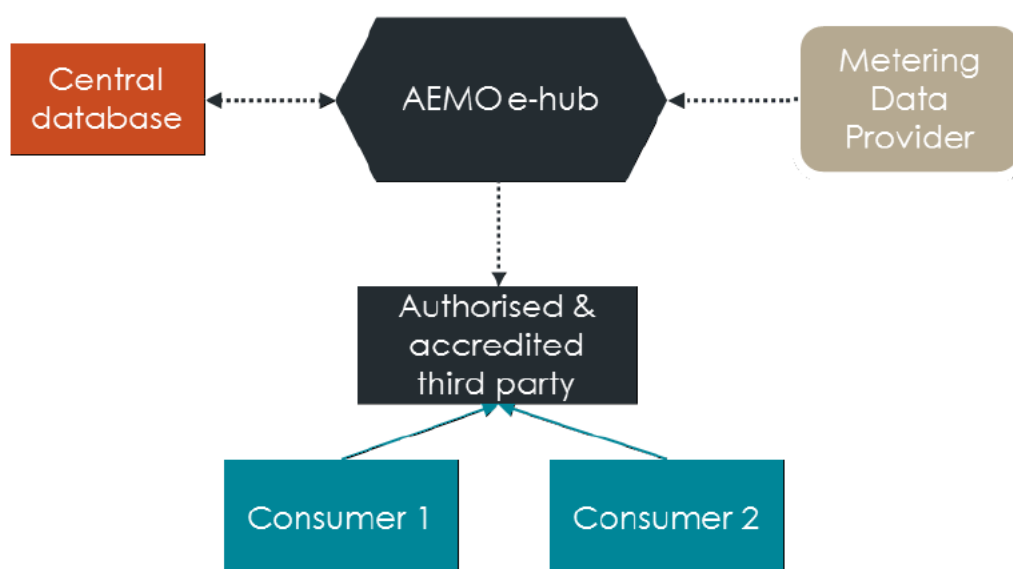
- AEMO has ready access to consumer electricity metering and NMI standing data in the NEM, either for the purpose of its market settlement function or in facilitation of the transfer of data between market participants; and
- by designating AEMO, it provides a single centralised point for accessing consumer metering and NMI standing data thereby avoiding duplication and likely minimising the costs to accredited third parties seeking consumer data, and retailers/distributors in developing on-demand systems to provide data.

In practical terms this approach would involve:

- AEMO being designated as the consumer metering and NMI standing data provider in the NEM, and so obligated to provide access to data in accordance with the CDR technical requirements;
- AEMO developing a centralised platform for transferring data to authorised and accredited third parties seeking access to metering data; and
- distributors and retailers no longer having responsibility for providing consumer metering data to authorised customer representatives.

Figure 2 provides a diagrammatic representation of data flows should AEMO be designated as the data provider for consumer energy data in the NEM.

Figure 2: Option 1 – Data flows with AEMO as designated data provider for consumer electricity metering and NMI standing data in the NEM



We would expect that a centralised platform for fulfilling the requirements for data transfer under the CDR could be implemented as an incremental addition to AEMO's existing information exchange systems. This would allow the transfer platform to benefit from existing data transfer systems, and thereby avoid the need to duplicate existing systems. The incremental costs of establishing the platform would therefore involve:

- project management and consultation with stakeholders;
- implementing and maintaining a process for data transfer;
- collecting customer related data from distributors or retailers, as needed;

- costs of setting up and maintaining the data repository;³⁴
- costs of developing and maintaining a data portal and associated interfaces in accordance with the CDR technical standards; and
- system testing prior to rollout.

5.3.2 Option 2 – Distributors or retailers alone being designated as data providers

Similar to Option 1, it would be possible to designate distributors or retailers as the designated data provider for consumer energy data in the NEM, both of whom have access to a consumer's electricity metering and NMI standing data.

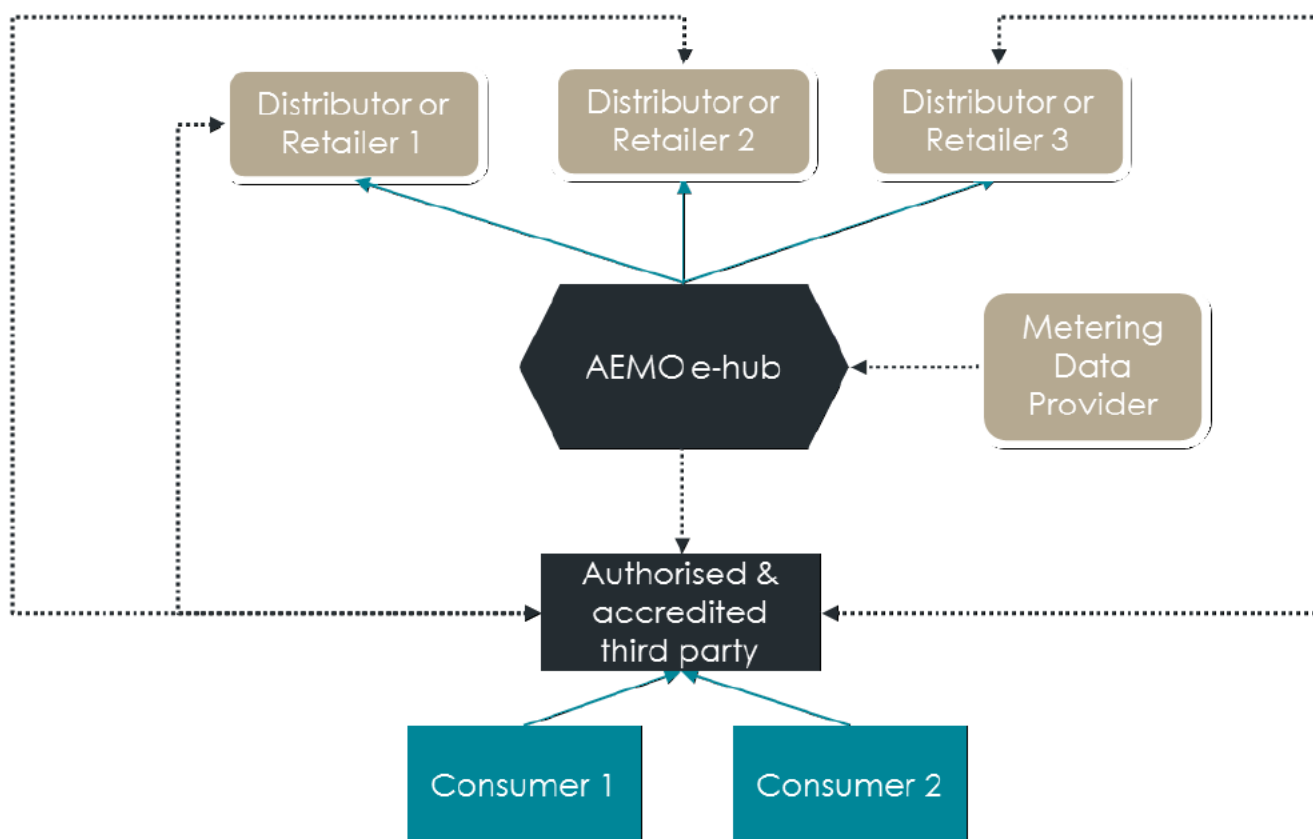
The key difference between this Option 2 and Option 1 becomes the need for each designated data provider (ie, distributors or retailers, as relevant) to satisfy the CDR technical data transfer and rules requirements of being a data provider. We would expect that this would involve some duplication compared to AEMO being the data provider, simply due to each provider needing to create its own systems and processes for on-demand provision of data to accredited third-parties.

In addition, it would create the environment for an accredited third-party needing to identify the distributor or retailer of a consumer in the NEM to whom data is being sought. While we would not expect this to be a significant barrier to accessing data, it would lead to some additional incremental costs compared to AEMO being designated as a data provider.

Figure 3 provides a diagrammatic representation of data flows should distributors be designated as a CDR data provider for consumer metering data.

Figure 3: Option 2 – Data flows with distributors/retailers as designated data providers for consumer electricity metering data in the NEM

³⁴ This could be avoided if third parties have direct access to the AEMO e-hub. However, this would assume AEMO's e-hub's capabilities would be expanded to include storage of historical information.



5.3.3 Option 3 – Multiple parties being designated as data providers

Under this final option all (or some subset, say distributors and retailers) holders of a consumer's data would be required to provide data to an authorised and accredited third-party under a CDR, and in accordance with technical standards. This approach is broadly equivalent to the current energy consumer data right, whereby a consumer can access data from either their retailer or distributor.

Under this option, accredited third parties would be able to request data from two or more of the relevant distributor, retailer, or AEMO— all of whom have access to consumers' metering and NMI standing data. We expect that this would involve each data provider changing systems to satisfy the data transfer technical standards to be specified by Data61. To the extent that this differs from existing approaches to sharing data, then this might require some investment in systems to satisfy the technical specifications.

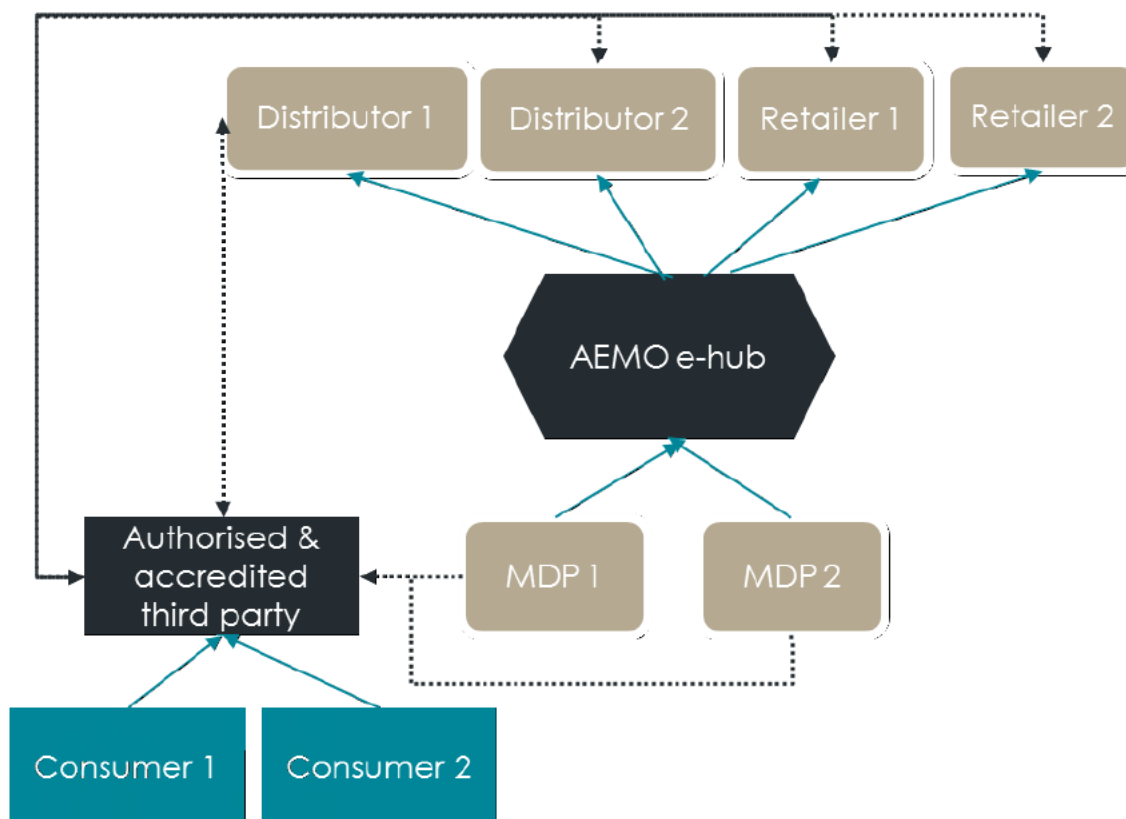
We expect that the incremental costs of a multi-provider approach to data provision would include:

- costs associated with engagement with the Data61 as the CDR Standards Body, to the extent that technical standards might need to be amended to accommodate ease of implementation of the standard for electricity metering data; and
- each data provider would need to incur upfront and ongoing costs of:
 - > implementing and maintaining a process for data transfer consistent with the agreed technical standards;
 - > the cost of developing and maintaining a data portal and API; and
 - > system testing prior to rollout.

In addition, we would expect this option to likely take the longest to implement, given the number of parties that would be required to invest in systems and processes to comply with the CDR requirements.

Figure 4 provides a diagrammatic representation of this multi-provider approach to providing electricity metering data under a CDR.

Figure 4: Option 3 - Data flows with multiple providers as designated data providers for consumer electricity metering data in the NEM



5.3.4 High-level evaluation of costs across each of the options

By way of summary, the options for designation of the data provider for consumer metering and NMI standing data in the NEM are:

- Option 1: AEMO as the designated data provider;
- Option 2: distributors or retailers are designated as data providers;
- Option 3: multiple providers, ie all or a subset of distributors, retailers and MDPs in the NEM are designated as data providers.

The main difference between the options are the number of organisations that are designated as data providers. Estimating a robust cost that each data provider will incur to fulfil its obligations under the CDR is difficult given the current lack of details around likely CDR data formats, security requirements and technical standards etc.

For the purpose of undertaking our evaluation, we have made some high-level assumptions to estimate ballpark figures of what each option would cost. We estimate that the establishment cost would be around \$242,000 to \$878,000 for each organisation that is designated as a data provider. Each data provider would

also have an on-going cost of between \$24,000 to \$176,000 per year – Table 1. This represents costs of around \$0.7 to \$3.5 million per data provider over the next 20 years in present value terms.³⁵

This suggests that the incremental cost of designating distributors as data providers would be around \$7 to \$35 million in present value terms over the next 20 years, and several times higher if the multi-provider approach was adopted. In addition to these costs, we would also expect that accredited third-parties would likely incur additional costs arising from managing multiple sources of data under any approach that involves multiple data providers.

Table 1: Assumed establishment and ongoing cost for each data provider

	Establishment costs	Ongoing costs per year ³⁶
Verification and data transfer system	\$78,000 – \$312,000 per data provider ³⁷	\$7,800 – \$62,400 per data provider
System changes	\$26,000 – \$104,000 per data provider ³⁸	\$2,600 – \$20,800 per data provider
Data portal	\$50,000 – \$100,000 per data provider ³⁹	\$5,000 – \$20,000 per data provider
Application programming interface	\$10,000 – \$50,000 per data provider ⁴⁰	\$1,000 – \$10,000 per data provider
Testing	\$78,000 – \$312,000 per data provider ⁴¹	\$7,800 – \$62,400 per data provider
Total	\$242k - \$878k per data provider	\$24k – \$176k per data provider per year

If AEMO is designated as the data provider (Option 1), then it would also need to incur establishment and ongoing costs. However, we also expect there might be some minor incremental establishment costs arising from distributors or retailers providing AEMO with customer information data to the extent this might be needed to fulfil consumer identity verification requirements under the CDR, and incremental data storage costs assuming AEMO systems would need to be upgraded to meet any data storage needs. We estimate that these costs are likely to be approximately \$138,000 to \$432,000 in additional establishment costs.⁴² We

³⁵ This assumes that implementation occurs in 2019 and the system 'goes live' in 2020. The discount rate used is seven per cent.

³⁶ Ongoing costs are assumed to be 10 to 20 per cent of establishment costs.

³⁷ The low case assumes it would take an internal business analyst (with a salary \$120,000 and associated overhead costs of 30 per cent) 6 months to set out the business requirements. The high case assumes that it would take an external consultant (at twice the cost of an internal staff) 12 months.

³⁸ The low case assumes it would take an IT staff member (with a salary \$120,000 and associated overhead costs of 30 per cent) 2 months to modify DNSPs existing systems. The high case assumes that it would take an external consultant (at twice the cost of an internal staff) 4 months.

³⁹ We have assumed that data is stored in the same format as those currently transferred amongst various parties. In other words, there is limited need to transform or manipulate the data. Low case assumes that a minimum viable product could be built for \$50,000. The high case assumes that the costs would be twice as much as the low option.

⁴⁰ Figures quoted in the PC report suggests that the initial cost of establishing an API would be around \$10- 50,000, with most being about \$20-25 000. Productivity Commission Data availability and use report, page 565.

⁴¹ The low case assumes it would take an IT staff member (with a salary \$120,000 and associated overhead costs 30 per cent) 6 months to test the system. The high case assumes that it would take an external consultant (at twice the cost of an internal staff) 12 months.

⁴² Low option based on Amazon RDS for MySQL Pricing, assuming a need for 10TB data. The high case assumes that the costs would be twice as much as the low option. We have also assumed that the data format AEMO will require will be similar to those currently stored by DNSPs. In other words, there is limited need to transform or manipulate the data. Given this, we have assumed that the low case would take an IT staff (with a salary \$120,000 and associated overhead costs 30 per cent) 6 months to migrate the data into the data warehouse. The high case assumes that it would take an external consultant (at twice the cost of an internal staff) 2 months.

anticipate that each distributor/retailer would also likely incur a one-off cost of between \$13,000 to \$52,000 to provide AEMO with any necessary data and establishment.

The large range in the estimated costs for implementing a CDR for consumer metering data in the NEM reflect the significant uncertainty regarding what the end requirements of the system will be, possible integration costs, and the required capabilities and features. Importantly, we have made the following assumptions:

- the B2B e-hub can be readily integrated with a centralised database, and so there is no need to modify the B2B e-hub;
- data procedures and definitions would be maintained as part of other processes, such as NEM12 file updates;
- the data would be stored using cloud storage, with appropriate data security features;
- there is scope to leverage existing systems, and so no need for additional hardware or licensing fees; and
- there would be minimal need to clean or transform the data.

It follows that the incremental costs of designating AEMO as the only data provider would be around \$1.3 million to \$4.6 million in present value terms over the next 20 years. This is significantly lower than the multi-provider approach or designating only distributors/retailers, because it avoids duplication in setting up multiple systems capable of providing on-demand access to meter consumption data. We also expect that the costs to third-party data seekers would be significantly lower if AEMO is the only data provider within the NEM.

Our estimates are broadly aligned with those suggested in the UK report on Data Sharing and Open Data for Banks. The authors of the report asked different organisations with experience in developing similar products for banks for their estimates of likely implementation costs.⁴³ Estimates from respondents were consistently below £1m, and tend to be around low to mid hundreds of thousands of pounds (which is around \$0.1 to 1 million in Australian dollars)⁴⁴.

However, our estimates are significantly higher than those suggested by a Deloitte Access Economics report. This report reviewed the likely costs Jemena would need to incur to comply with obligations introduced as part of the power of choice recommendations⁴⁵. The report suggests that Jemena would need to incur \$1.9 in capital cost to provide automated process when customers and authorised third parties request their electricity metering data.

The costs from Deloitte Access Economics are several times higher than our estimates. That said, using a higher cost estimate would likely mean designating AEMO as the only data provider would result in even greater cost efficiencies, when compared to the alternative approaches.

5.4 Options for data provider of consumer gas metering data, retail product data, and electricity metering data outside of the NEM under a CDR

We have not considered in detail the options for choice of CDR data provider for consumer gas metering data, retail product data, and electricity metering data outside of the NEM. This is because:

⁴³ Fingleton Associates, *Data Sharing and Open Data for Banks - A report for HM Treasury and Cabinet Office*, September 2014, page 87.

⁴⁴ We have used an exchange rate of \$1AUD = \$0.55 British Pound.

⁴⁵ Deloitte Access Economics, *Review of Power of Choice Business Case*, December 2015, page 39.

- some data might be best provided by the collectors of the data in a decentralised manner; and
- other data might be most cost effectively provided by AEMO alongside metering data that is already being provided.

Indeed, once AEMO has developed the systems and processes for providing electricity metering data under a CDR, then it might be well placed to provide a data gateway interface for other designated data providers for additional energy consumer datasets subject to a CDR.

That said, we believe it is important for practical matters to be considered when choosing the best data provider or transfer mechanism to fulfil the CDR requirements, for a given consumer dataset. This should also include considering any cost efficiencies that might be achieved through alternative approaches to providing the data under a CDR. Given our recommendation that these datasets be made available after electricity metering data has been provided under the CDR, there is time to consider the best choice of data provider for these additional consumer energy datasets.

Irrespective of the approach taken to data provision, some form of customer identification that is common across all datasets will be needed to ease matching and comparison by third parties of a customer's data provided from different API sources. We expect that this requirement will be specified as part of the data standards for energy data.

Recommendation 11: The COAG Energy Council request the Australian Competition and Consumer Commission to examine and designate a data provider for, consumer gas metering data, retail product data, and electricity metering data outside of the National Electricity Market, no later than 12 months prior to these datasets being subject to a Consumer Data Right.

5.5 Other considerations

We do not believe that there are competition or other public interest considerations that need to be taken into account in deciding on the designation of data provider for the proposed consumer energy datasets. It follows, that the most cost-effective method for providing on-demand data access to electricity data, in line with the anticipated technical standards should be chosen.

5.6 AEMO should be the designated data provider under a CDR for consumer metering data and NMI standing data in the NEM

Our assessment of options for data provider for consumer metering data in the NEM leads to a conclusion that AEMO is best placed to be designated to be the data provider under the CDR. Our reasoning is as follows:

- AEMO has access to consumer metering data via its existing systems, and is familiar with the systems and processes that will be needed to satisfy the CDR's data transfer requirements;
- There are benefits from having a single provider in the NEM, arising from it likely being lower cost to implement with lower implementation risks. We believe it will also simplify the process of accessing metering data by authorised and accredited third parties in the NEM.
- AEMO's role in operating and settling the national electricity market means it has the requisite skills and expertise to build the systems necessary to satisfy the likely CDR data transfer technical standards.
- It is likely that a single data provider in the NEM will be able to provide CDR data transfer more cost effectively than if each distributor in the NEM was required to satisfy the CDR technical standards.
- We expect the costs to be incurred by accredited third parties accessing data will be significantly lower if there is only one data provider within the NEM.

Stakeholder submissions were mixed as to whether a centralised data hub administered by AEMO was likely to be the best approach – Box 3.

Box 3: Stakeholder comments on a centralised data hub hosted by AEMO

Stakeholders had mixed opinions about the appropriateness of AEMO acting as a centralised data hub for facilitating access to consumer energy data. Those in support of AEMO as a data provider in the energy sector, acknowledged the likely cost efficiencies compared to alternative approaches, and the scope to easily facilitate access to data through a centralised hub.⁴⁶ Stakeholders not supportive of AEMO raised concerns about possible security vulnerability from a centralised hub, and its inability to appropriately verify identify of the customer seeking data.⁴⁷ Most stakeholders agreed that avoiding unnecessary cost and duplication were key objectives.⁴⁸

On balance we believe that the benefits from ease of access and likely costs efficiencies outweigh the security or other vulnerability risks arising from AEMO being the designated data provider for electricity metering data in the NEM. Indeed, the CDR framework is intended to be the principal means for managing security and privacy risks, and so these risks are expected to be managed through the regulatory framework for the CDR.

Recommendation 12: The Australian Energy Market Operator be designated as the Consumer Data Right data provider for electricity metering and NMI standing data in the National Electricity Market.

⁴⁶ See for example submissions from the Consumer Action Law Centre, and the Australian Sustainable Built Environment Council.

⁴⁷ See for example submissions from Red Energy and Lumo Energy, and Origin Energy.

⁴⁸ See for example the submission from the Australian Energy Council.

6. Implementation and next steps

Implementing the CDR in the energy sector in line with our recommendations, will require some initial preparatory activity. This principally surrounds ensuring that AEMO has the rights to share electricity metering data, to support it being designated as a data provider under the CDR for electricity metering data.

This section briefly summarises the next steps and timeframes for implementation of a CDR. This is followed by a brief discussion about the next steps for implementing the CDR in the energy sector, and proposed changes to the NERs to support the transition to a CDR in the energy sector.

6.1 Next steps for the Consumer Data Right

The government has accepted the recommendations of the Open Banking Review, with a phased implementation in the banking sector from July 2019. It is proposed that the big four banks will make data available under the CDR, as follows:⁴⁹

- credit and debit card data available by July 2019;
- mortgage account data by 1 February 2020, and
- the remaining data types recommended by the open banking review by 1 July 2020.

Other banks will have an additional 12 months for each of the dates above. The ACCC will be responsible for determining the detail of phasing, and will have flexibility to adjust the timing where required.

Simultaneously with the implementation of the CDR in banking, there will be necessary legislative changes to implement the CDR. We understand that the Treasurer is currently developing draft enabling legislation for the Consumer Data Right, which will be the subject of consultation in the coming months.⁵⁰

6.2 Next steps for implementing the Consumer Data Right in the energy sector

To facilitate the speedy transition to a CDR in the energy sector, there are a number of steps that should be undertaken as a matter of urgency.

First, the COAG Energy Council should submit a rule change proposal to the AEMC to change the NERs to allow AEMO to support its role as a designated data provider under the CDR.⁵¹ This change will allow AEMO to operate and maintain necessary platforms as the data provider for electricity metering data subject to a CDR in the NEM.

Once AEMO has been given the scope to be a designated data provider under the CDR, the COAG Energy Council should request that the Treasurer designate electricity metering data as being subject to a CDR, with AEMO being the designated data provider in the NEM.

The COAG Energy Council should also request that the ACCC provide accreditation to existing AEMO energy market participants as data recipients within the energy sector, with market participation accreditation to be reviewed once the processes for accreditation of third parties has been developed.

To support the implementation of the CDR for electricity metering data, the COAG Energy Council should direct AEMO to commence developing a platform for fulfilling its role as designated data provider for electricity

⁴⁹ The Treasury, *Consumer Data Right*, 9 May 2018, page 8.

⁵⁰ *Ibid.*

⁵¹ Appendix A.2 provides more detail as to the rule change that should be submitted to the AEMC.

metering data. In addition, AEMO and other energy stakeholders should commence collaborating with the ACCC and Data61 on the development of the CDR rules and technical standards to ensure that they are consistent with the needs of the energy sector.

Finally, the COAG Energy Council should recommend that the ACCC examine who should be designated as the data provider for electricity consumer metering data outside of the NEM, gas consumer metering data, and retail product data.

We believe that the CDR for consumer electricity metering data should be fully implemented no later than December 2019. This means that accredited data recipients should be capable of accessing electricity metering data from AEMO by that time in the NEM.

The timeframes for implementation of the additional consumer energy datasets will depend on a number of practical considerations. That said, they should be made incrementally available, with all consumer energy datasets subject to the CDR being available no later than June 2020.



A1. Stakeholder engagement

We have had extensive stakeholder engagement with distributors, retailers, third-party service providers, consumer representatives, and government agencies during this project. In total, we received 32 written submissions from stakeholders.

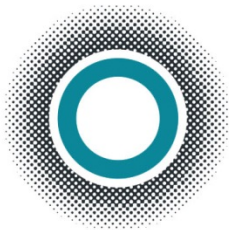
In addition, we have also held several workshops with stakeholders to date, including:

- a whole day workshop with all stakeholders on 15 November 2017 in Melbourne;
- and half day workshops in Melbourne with:
 - > distributors on 11 December 2017;
 - > retailers on 11 December 2017; and
 - > consumer/third-party data users on the 12 December 2017; and
- a whole day workshop to present preliminary findings and an update on the progress of the open banking review to all stakeholders on 5 March 2018 in Melbourne.

We received 33 submissions in response to our discussion paper. The following organisations provided a submission:

- Australian Competition and Consumer Commission;
- Australian Energy Council;
- Australian Energy Market Operator;
- Australian Renewable Energy Agency;
- AGL Energy;
- Australian Sustainable Built Environment Council;
- AusNet Services;
- Clean Energy Council;
- Chapel Group;
- Choice;
- City of Sydney;
- Consumer Action Law Centre;
- Dr Martin Gill;
- Energy Consumers Australia;
- Endeavour Energy;
- EnergyAustralia;
- EnerNOC;
- Energy Queensland;
- Green Building Council of Australia;

- Jemena;
- Dr Anne Kallies, and Dr Sangeetha Chandrashekeran;
- NextGen Utilities;
- Ohm Power;
- Origin Energy;
- Public Interest Advocacy Centre;
- Queensland Farmers' Federation;
- Red Energy, and Lumo Energy;
- S&C Electric Company;
- SunTenants;
- Tasmanian Council of Social Service;
- Victorian Council of Social Service;
- Vector Energy; and
- WATTever.



HOUSTONKEMP

Economists

Sydney

Level 40
161 Castlereagh Street
Sydney NSW 2000

Phone: +61 2 8880 4800

Singapore

8 Marina View
#15-10 Asia Square Tower 1
Singapore 018960

Phone: +65 6817 5010