# Draft 4.0 New Energy Compact

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## 1. Preamble

*Why we need a New Energy Compact*
Our energy system has changed – and will continue to rapidly change – from a centralised, one way system dominated by baseload fossil fuel generation, to a hybrid system that incorporates more renewable, decentralised, variable energy with two way flows. People, businesses and communities are not only consuming energy, but are increasingly generating, storing, managing and trading their own energy. The change has been driven by the need to decarbonise because of climate change, new technology, and greater engagement by some people, businesses and communities to meet their energy needs.

The change presents an opportunity to not only ensure that energy remains an essential service, core to the health of people, business and the Australian economy but also to create a more **inclusive and sustainable energy system that actively improves outcomes for all.**

Achieving this vision will require new technologies, business models, policies, regulatory and market reforms, and will need the energy industry to engage differently with people, business and the community. It will require new and more transparent approaches that put people, businesses and communities first; meets them where they are; and leaves no-one behind.

To achieve this new vision, a principles-based framework is needed to guide change in a way that is consistent with people and community values. The principles facilitate a new way of thinking about energy underpinned by human-centred design, a win-win mentality, and reciprocity between participants based on trust.

*Who should use the New Energy Compact*
The New Energy Compact is intended to guide energy market regulatory reform, policy development, energy service development and energy user engagement processes, and should be used in addition to the national energy market objectives (which many believe are no longer fit for purpose). The principles are therefore to be used by those:

- Engaged in reforming the energy system through developing legislation, rules, regulation, models, policies, measures.
- Developing energy services

Their legitimacy and expected impact derives from the people centred focus and comprehensive stakeholder consultation process that has led to their development.

### How to use the New Energy Compact

The complex nature of the energy market and people's interactions with it mean that some principles may sometimes appear to be in tension with others. A methodology has been developed to apply the principles, which includes: bringing together a range of stakeholders and together clearly define the problem, identify and apply principles, objectives and requirements, to produce a range of options to solve the problem. The options are then tested against the principles, objectives and requirements. If applied appropriately the New Energy Compact serves as a point of reference or benchmark against which alternative developments, scenarios or reform processes can be tested and optimal outcomes secured.

Where the practical application of one principle appears to be in conflict with another,  we should endeavour to find solutions which honour the spirit or intent of both, with final decisions being transparent and justifiable in terms of the overarching vision.

**Flexible and open-ended**
Finally, the New Energy Compact is not fixed, and are expected to evolve over time with experience and further consultations. This document therefore aims to be as flexible and open-ended as possible, while recognising that the future may become more rather than less uncertain.

## 2. Vision

An inclusive, sustainable energy system that actively improves outcomes for all

## 3. Principles



Hexagon diagram of guiding principles:
- Think long-term and be responsive
- Zero emissions and environmentaly responsbile
- Put the needs of people at the centre
- Energy is an essential service; everyone has the right to access clean, affrodable, dependable energy (centre)
- Is secure, reliable and resilient
- Be just and Fair
- Drive efficiency and reduce waste

| Guiding principles | Key concepts | Description | Principles in action |
|---|---|---|---|
| *Core values to guide energy market policy, regulation and reform* | | *Short description of the intent of the guiding principle* | *How the guiding principles are applied to energy market policy, regulation and reform* |

| Energy is an essential service; everyone has the right to access clean, affordable, dependable energy | | An energy system that recognises electricity is an essential service - it is critical to the health, wellbeing, economic participation and inclusion of people and business | |
|---|---|---|---|
| **Think long-term and be responsive** | Forward looking, Flexible Innovative, Self-correcting, Maximizes benefits, Transparent Certainty, Confidence, | An energy system that is developed now with a focus on delivering the energy system we will need in the future. It is flexible and can quickly and positively respond to change, including the need to decarbonise energy and take advantage of megatrends including energy user expectations, electrification of transport, digitisation and decentralisation of energy services. It is transparent to build trust and increase confidence. | 1. Articulate clear long term objectives to assess incremental changes, innovations, policies, and regulations against the end state we are heading for. 2. Test the current state and potential reforms against a range of possible future scenarios and assess their ability to withstand large and sudden changes. 3. Assess changes against a wide-range out outcomes including system reliability, security, cost and distributional effects. Draw in relevant domain expertise early in the formulation of reforms and co-design solutions reflecting the broad range of factors that may need to be balanced across different time-scales. 4. Where there is uncertainty, identify and implement least regrets actions and try and preserve optionality. 5. Where the net benefits of an approach is uncertain, test it with a range of stakeholders (including energy users) prior to full implementation, including through trials and regulatory sandboxes. 6. There should be ongoing investment in research and development for innovation to build options for the future 7. Regulatory reform process should be agile and responsive to change in energy user needs and preferences, environment and technology. |

| Put the needs of people at the centre | Accessible Simple, Transparent, Agency, Empowerment, Participation, Cocreate, Diversity of voice, Community, Protection, Accountable Trust | An energy system that meets people, businesses and community where they are at and gives them what they need. It does this by understanding and engaging people and businesses in the system, its design and operation. Actors in the energy system are honest and transparent about their actions | 1. Everyone has a right to access energy and for it to meet their need.<br>2. Participation in energy production and services is an opportunity for all, and an obligation for none.<br>3. Choice is optional not compulsory and the choice not to participate is retained, without disadvantage.<br>4. There should be a focus on innovation and investment to develop a range of energy production and service models to meet the diverse needs of people, businesses and communities.<br>5. Energy service providers take responsibility to understand and to work with people and businesses to better meet their needs, provide choice and improve their outcomes.<br>6. Energy service providers, provide a range of clear, learnable and transparent options for energy users. Accompanied by simple information and tools to assist people make informed choices and manage their outcomes.<br>7. Energy service platforms are open and portable to provide choice and support innovation and effective competition.<br>8. People, businesses and community are enabled to contribute to society, economic development and a sustainable environment.<br>9. Decision makers should bring a diversity of people and businesses are at the table when reform, regulation, policy, new services and products are being developed, tested and refined.<br>10. Adequate protections are in place to enable full participation in the energy system and meet the needs of people and business.<br>11. Education and support programs are essential to ensure people are informed of their rights and can access assistance to activate them if required. |

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| | | | 12. Energy participants are trustworthy and act with integrity.<br>13. The actions or choices of one participant do not impact negatively upon the system or the choices and outcomes of others.<br>14. Energy participants understand their obligations are when engaging in the energy system and respect that.<br>15. Better energy user metrics and data collection at national, state and energy company level to inform better decision making. |
| **Be just and fair** | Social justice<br>Equitable,<br>Just transition,<br>Inclusive,<br>Government intervention | A system that is developed in ways which are mindful of implications for people's abilities to live healthy lives. The energy system acts in the long-term interests of the community. It is just, fair and inclusive; where no-one is left behind. This includes people, workers and communities impacted by the transition in the system. Costs and benefits are equitably distributed, recognising governments will play a role in supporting a just and fair system. | 1. Fair distribution of costs and benefits that rewards people for the services they provide and discourages actions that contribute to costs to others.<br>2. Wherever possible, the user and system-wide costs and benefits of initiatives should be made clear and transparent, so that decision makers and energy participants can respond appropriately.<br>3. Public spending should be targeted to maximise not only the economic Electricity is an essential service and as such, disconnection should never be an option for customers who are unable to pay. People at risk or in financial hardship should be supported, not penalised. and environmental benefits but also to reduce inequity between energy user cohorts (e.g. haves v have nots and first comers v late comers).<br>4. Government policy related costs should be recouped in a progressive way, not recouped through energy bills where low-income households pay disproportionately more of their income on electricity, and ideally come instead from government budgets.<br>5. Cross-subsidies should be transparent and justifiable. To energy users.<br>6. Appropriate regulation is put in place to ensure fair |

pricing and energy service provider behaviour where competition is failing to deliver an affordable essential service.

7. Complementary measures - ie non-market interventions or measures may be required to ensure a just and fair energy system.
8. Risks sit with those best placed to manage them.
9. Electricity is an essential service and as such, disconnection should never be an option for customers who are unable to pay. People at risk or in financial hardship should be supported, not penalised.
10. Everyone who needs assistance should receive it**.**Energy hardship is identified early, and processes put in place to reduce energy hardship including through access to payment support.There are broader social, economic and cultural benefits that flow from investing in more effective supports for customers at risk of energy hardship and disconnection.
11. Program designed to meet the needs of people experiencing hardship must be delivered through trusted community services with an understanding of different customers' abilities, preferences and needs.
12. Where energy remains unaffordable for people on low-income or experiencing disadvantage, governments should provide adequate and equitable financial support to meet their essential needs.
13. Facilitate a just transition for workers and impacted communities:
    a. Workers in coal and gas generation and mining should be supported though:
        i. organised economic and employment diversification policies within sectors and communities at risk;
        ii. formal education, training, retraining, and life-long learning for workers, their families, and

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| | | | their communities<br>iii. social protection measures (active labour market policies, access to health services, social insurances, among others);<br>b. Institutionalised formal consultations with relevant stakeholders including trade unions, employers and communities, at national, regional and sectoral levels;<br>c. The promotion of clean secure job opportunities and the greening of existing jobs and industries through public and private investment in low carbon development strategies and technologies and the appropriate educational qualifications that enhance workers' capacity;<br>d. Respect for and protection of human and labour rights. |
| **Drives efficiency and reduces waste** | Cost effective, Reduces energy use, Asset utilisation Business productivity Optimal resource usage Avoids waste Complimentary measure | A system that achieves increasing productivity across all aspects of the supply chain and promotes efficient energy usage. The system avoids wasteful investment and instead innovates to find solutions to realise the benefits of new technologies, natural resources and capacity of people, business and community. | 1. The energy system is economically efficient to drive more affordable energy.<br>2. Prioritises energy services that reduce peak energy flows where this is more efficient than building out new network or generation capacity.<br>3. Provides incentives for load flexibility, to take advantage of low demand periods, so as to enhance the utilisation of generation and network infrastructure.<br>4. Promotes and enables energy efficient technology and behaviors than enhance consumer welfare and reduce the costs of the energy system.<br>5. Recognise that the cost of energy is impacted by a range of market barriers (e.g. split incentives and access to capital) which can be addressed by complementary measures. |
| **Is secure, reliable and resilient** | reliable, | An energy system that | 1. The power system can operate securely within defined |

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| | secure, resilient safe | has enough stable energy supply to meet needs and can produce and deliver it when needed. In the face of extreme weather events and cyber attacks the energy system is its self resilient and strengthens the resilience of people, businesses and communities. | technical limits through credible contingency events and regardless of the change in generation mix.<br>2. Ensure sensible reliable energy supply (generation and networks) noting aiming for 100% reliability comes at a high cost, and solutions such as demand management and distributed energy can sometimes provide lower cost solutions.<br>3. Informed and empowered, users can trade off reliability and price.<br>4. Contributors to a resilient system are identified and appropriate incentives are created to ensure adequate service provision.<br>5. Regulation and policy incentivise investment that will help build greater resilience, especially by networks - current examples include islandable microgrids.<br>6. Recognise and incentivise the role of *DER users* in contributing to a more resilient energy system - current examples include ensuring housing stock, commercial & public buildings are energy efficient; utilising rooftop or community solar in island mode and home batteries for back-up; demand response; virtual power-plants; incentivising electric vehicles etc.<br>7. Prioritise investment to build the resilience of critical infrastructure (eg hospitals, emergency services and communications).<br>8. Reliability, security and resilience metrics and data collection to inform efficient investment. |
| **Zero emissions and Environmentally responsible** | Decarbonisation, Environmentally conscious | A system that has zero emissions, that uses and produces energy in an environmentally responsible way and does not unnecessarily | 1. Set a trajectory to zero emissions in line with limiting global warming to 1.5 degrees.<br>2. Put a price on carbon.<br>3. Prioritise investment in renewable zero emissions technology.<br>4. Avoid energy sources that have negative externalities for |

| | | interfere and harm nature. | people and the environment. 5. Production of physical elements of energy should be done sustainably and socially responsibly. |
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## 4. Methodology to apply new Energy Compact

1. **Co-design**: Bring together key stakeholders to co-design
2. **Problem definition**: define the particular problem trying to be solved
3. **Principles:** consider principles that should guide the outcome by informing objectives, requirements, options and testing. They can be drawn from the New Energy Compact's principles in action and or expanded on to provide more detail.
4. **Objectives and Requirements:** Identify objectives utilising the principles and if necessary what requirements or parameters that also may need to be considered.
5. **Options**: identify a range of potential solutions to the problem.
6. **Test**: Test solutions against principles, objectives and requirements
7. **Iterate**: go back to various stages of the process if necessary to refine and resolve. tensions

Problem definition: define the particular problem trying to be solved

Principles: consider principles that should guide the outcome

Iterate: go back to various stages of the process if necessary to refine and resolve tensions

Co-design: Bring together key stakeholders to co-design

Objectives and Requirements: Identify objectives utilising the principles & if necessary what requirements or parameters that also need to be considered

Test: Test solutions against objectives and requirements

Options: identify a range of solutions to the problem

# Draft 2.0 New Energy System vision and principles

**Vision**

An inclusive, sustainable energy system (ecosystem) that actively (proactively) improves outcomes (the lifestyles) for all.

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**Preamble**

Our energy system has changed – and will continue to rapidly change – from a centralised, one way system dominated by baseload fossil fuel generation, to a hybrid system that incorporates more renewable, decentralised, variable energy with two way flows. People, businesses and communities are now generating, storing, managing and trading their own energy. The change has been driven by the need to decarbonise because of climate change, new technology, and greater engagement by some people, businesses and communities to meet their energy needs.

The change presents an opportunity to not only ensure that energy remains an essential service, core to the health of people, business and the Australian economy but also to create a more **participatory and sustainable energy system that actively improves outcomes for all Australians.**

Achieving this vision will require new technologies, business models, policies, regulatory and market reforms, and will need the energy industry to engage differently with people, business and the community. It will require new and more transparent approaches that put people, businesses and communities first; meets them where they are; and leaves no-one behind.

To achieve this new vision, a principles-based framework is needed to guide change in a way that is consistent with energy user and community values. The principles facilitate a new way of thinking about energy underpinned by human-centred design, a win-win mentality,

and reciprocity between participants based on trust.

This vision and these principles are intended to be applied to energy market policy and regulatory reform and user engagement processes, and be recognised as part of the national energy market objectives. Their legitimacy and expected impact derives from the comprehensive stakeholder consultation process that has led to their development.

The complex nature of the energy market and people's interactions with it mean that some principles may sometimes appear to be in tension with others. However, if applied appropriately they serve as a point of reference or benchmark against which alternative developments, scenarios or reform processes can be tested and optimal outcomes secured. Where the practical application of one principle appears to be in conflict with another,  we should endeavour to find solutions which honour the spirit or intent of both, with final decisions being transparent and justifiable in terms of the overarching vision.

Finally, these principles are not fixed, and are expected to evolve over time with experience and further consultations.We recognise that the energy system may evolve in a way that challenges these principles, potentially requiring new principles or a different, non-principles based approach. This document therefore aims to be as flexible and open-ended as possible, while recognising that the future may become more rather than less uncertain.

| Guiding principles<br><br>*Core values to guide energy market policy, regulation and reform* | Key concepts | Description<br><br>*Short description of the intent of the guiding principle* | Principles in action<br><br>*How the guiding principles are applied to energy market policy, regulation and reform* |
| --- | --- | --- | --- |
| | | | |

| 1. Create a sustainable future | Forward looking, Certainty, Confidence, Decarbonisation, Sustainable, Innovation, Maximising benefits, Efficient, | A system that is developed with a focus on delivering the energy system we will need in the future, including trajectories to reduce emissions and accommodating emerging technologies and markets. The system avoids wasteful investment and instead innovates to find solutions to realise the benefits of new technologies, natural resources and capacity of people, business and community. The system is sustainable in that it maximises energy productivity, minimises impacts on the environment and represents improvement both in terms of socio-technological advances and quality of life. | 1. Have a long-term sustainable vision and goal that includes a trajectory to reduce emissions, and accommodates emerging technologies and market.<br>2. The long-term sustainable vision and goal describes what the electricity system of the future needs to look and act like, so we can assess incremental changes, innovations, policies, and regulations against the end state we are heading for. Any initiative should ask, does this help us achieve the vision and goal? Where there is uncertainty, or a formal long-term vision has not been agreed, reforms should still be forward looking based on the best information, clearly articulate what we are trying to achieve both immediately and in the longer term, be least regrets and mitigate risk of lock-in.<br>3. Energy companies align their strategy to the long-term sustainable vision and goal including by reducing their carbon emissions & supporting people and businesses to also do so.<br>4. New reforms, regulations, policies and measures should also be assessed against broader sustainability criteria:<br>   a. Reduce emissions in line with Paris agreement<br>   b. Does not harm to the environment<br>   c. Reduce energy use and or/waste<br>   d. Avoid gold plating<br>   e. Avoid stranding assets<br>   f. Improve health impacts<br>   g. Improve quality of life<br>5. Regulatory reform processes should be agile and responsive to customers, environment and technological change.<br>6. The energy system, regulation, and policy is designed to encourage innovation to: |

| | | | a. Achieve energy user principles<br>b. Meet energy system long-term vision and goals; and<br>c. Respond to and anticipation of changing conditions.<br>7. Government spending targeted to achieve social and environmental outcomes as well as economic benefits. |
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| 2. Put the needs of energy users at the centre | Simple, Transparent, Agency, Empowerment, Participation, Cocreate, Diversity of voice, Community, Protection, Accountable | A system that meets people and businesses where they are at and gives them what they want. It does this by pursuing simplicity and transparency; by empowering people and businesses to participate, where the rights of one participant does not harm others and all actors are honest and transparent about their actions; it engages people and businesses in the system, its design and operation; and enables  people, businesses and community to contribute to society, economic development and a sustainable environment. | 1. Participation in energy production and services is an opportunity for all, and an obligation for none. 2. The energy system supports investment in a range of energy production and service models to meet the diverse needs of people, businesses and communities. **3.** Energy companies to take responsibility to understand and to work with people and businesses to better meet their needs, have more choice and improve their outcomes**.** 4. There are a range of simple and transparent options for customers. 5. Platforms and businesses don't lock people into a particular service or restrict competition and innovation. 6. People and business have the information and tools readily available to make informed choices and manage their outcomes. 7. A diversity of people and businesses are at the table when reform, regulation and policy is being developed and decisions made. 8. Evidence about what works for energy users  inform decisions. Different approaches are designed, tested and refined with people and business. 9. Adequate protections are in place to enable full participation in the energy system and meet the needs of people and business. 10. The actions of one participant does not disadvantage others. |
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| 3. Foster a just and fair energy system | Social justice Equitable, Just transition, Inclusive, Government intervention | A system that is developed in ways which are mindful of implications for people's abilities to live healthy lives; it acts in the long-term interests of the community; it is just, fair and inclusive; where no-one is left behind, including people, workers and communities impacted by the transition in the system; and it equitably distributes costs and benefits, recognising governments will play a role in supporting a just and fair system. | 14. Fair distribution of costs and benefits where main beneficiary pays and payer benefits. <br> 15. Risks sit with those best placed to manage them <br> 16. Wherever possible, the user and system-wide costs and benefits of initiatives should be made clear, so that policy makers and consumers can respond appropriately. <br> 17. Public spending should be targeted to maximise not only the economic and environmental benefits but also to reduce inequity between consumer cohorts. <br> 18. Subsidies should not be recouped through bills, where low-income households pay disproportionately more of their income on electricity, and ideally come instead from government budgets. <br> 19. Cross-subsidies should be transparent and justifiable. <br> 20. Complementary measures - ie non-market interventions or measures may be required to ensure a just and fair energy system. |
| --- | --- | --- | --- |
| 4. Recognise energy as an essential service | Available Affordable, reliable, secure, Safe, | A system that recognises electricity is an essential service and people and businesses should have access to energy services both in terms of availability and affordability. A system that is reliable and safe both in the production and delivery of energy services. | 1. All people and businesses have a right to access energy, and for it to meet their needs and wants, <br> 2. Disconnections due to non-payment should not occur. <br> 3. New investment must be economically efficient while avoiding investment which is not in the short or long-term interests of people and business. <br> 4. The energy system operates in an economically efficient manner. <br> 5. The power system can operate securely within defined technical limits, even if there is an incident such as the loss of a major transmission line or large generator. <br> 6. Ensure reliable energy supply (generation and networks) that has a high likelihood of supplying demand most of the time. Noting aiming for 100% reliability comes at a high cost, and solutions such as |

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| | | | demand management and distributed energy can provide lower cost solutions (see principle on resilience).<br>7. Informed and empowered, users can trade off reliability and price.<br>8. Energy hardship is identified early, and processes put in place to reduce energy hardship including through access to payment support.<br>9. Where energy remains unaffordable for people on low-income or experiencing disadvantage, governments should provide adequate and equitable financial support to meet their essential needs. |
| 5. Build resilience | Resilient system<br>Resilient homes and businesses,<br>Reduce energy use,<br>Reduce risk,<br>Flexible, | A system which is resilient in the face of severe weather events, cyberattacks & other high impact, low probability events. By supporting the resilience of people and community via more resilient homes and businesses by reducing energy use, improving energy efficiency, supporting a mix of distributed energy resources and large centralised energy, investing to improve the resilience of critical infrastructure that benefit society and the economy. | 9. Ensure resilience is part of the long-term sustainability vision and goal of the energy system and is promoted and incentivised amongst energy system participants.<br>10. Contributors to a resilient system are identified and metrics are developed to support ongoing development.<br>11. Regulation and policy incentivise investment in resilience, especially by networks - current examples include islandable microgrids.<br>12. Recognise and incentivise the role of *DER users* in contributing to a more resilient energy system - current examples include ensuring housing stock, commercial & public buildings are energy efficient; utilising rooftop or community solar in island mode and home batteries for back-up; demand response; virtual power-plants; incentivising electric vehicles etc.<br>13. Prioritise investment to build the resilience of critical infrastructure (eg hospitals, emergency services and communications). |

**Scenarios for testing: PLEASE SUGGEST OTHERS (we will choose the 3 or 4 best/gnarliest)**

|   | Scenario | Related principles | Potential solution/s* |   |
|---|---|---|---|---|
| 1 | The costs of decarbonising the energy system are being borne disproportionately by disadvantaged people. | 1 V 3<br>Sustainability v fairness | More costs of the transition should be recovered via taxes rather than energy bills.<br>Direct beneficiaries of DER should pay associated costs. |   |
| 2 | Those with more money can buy greater resilience. | 4 V 5<br>Essentiality v resilience | True, but market mechanisms & govt policy should focus on the shared system & not leaving anyone behind (ie the public rather than private benefits of resilience) |   |
| 3** | Choosing your own level of reliability to potentially save money could compromise the essential nature of the service. | 4 V 4<br>2 implications of essentiality | ? |   |
| 4 | Tariff reform is important to reflect current & future system costs, but can be regressive & hard for vulnerable households to respond to. | 1 V 3<br>Sustainability v fairness | Introduce gradually.<br>Ameliorate network tariff reforms through well designed retail tariffs.<br>Trial innovative tariffs. |   |
| 5 | Everyone wants lower bills, but the transition wont come cheap | 1 V 2<br>Sustainability v user focus | Incentivise lowest cost infrastructure investments.<br>Involve users in designing the future system. |   |
| 6 | Early PV owners get large exports while latecomers are constrained | 1 V 3<br>Sustainability v fairness | Introduce dynamic DER export management (via inverters).<br>Introduce dynamic (time- & location-specific) DER export pricing. |   |

| | | | Explore low cost network tech changes. | |
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* This is to help us, and need not be shown to forum participants
** I dont think this is an important issue and would rather focus on more pressing issues (please suggest)

Notes
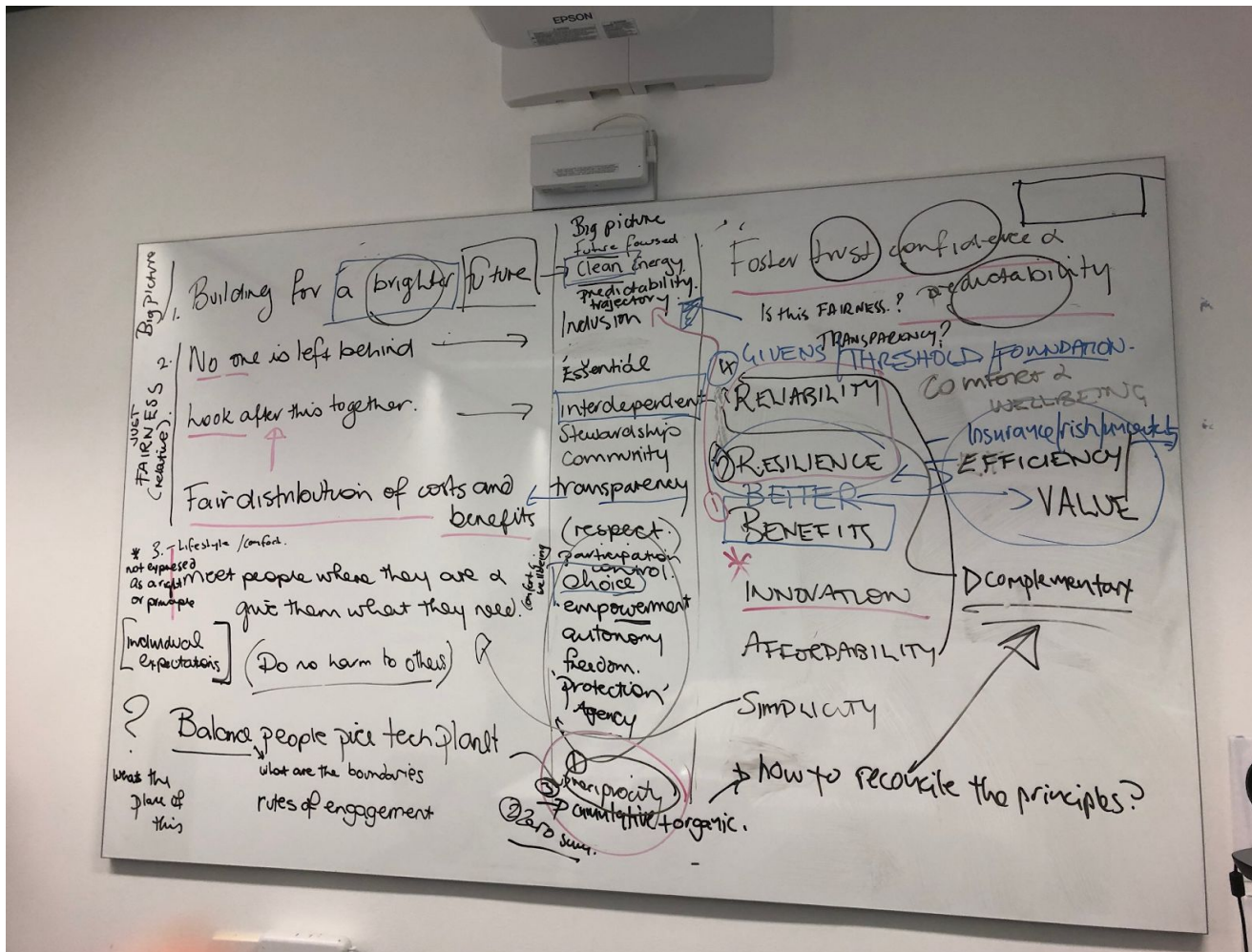
**Workshop guiding principles**

1. Building a brighter, cleaner future
2. No-one is left behind
3. Do no harm
4. Shared stewardship

5. Fair distribution of costs and benefits
6. Meet people where they're at and giving them what they need
7. Balance values and interests Fosters trust, confidence and predictability

**Craig Memery design Principles for sharing costs, risks and benefits:** 1. Beneficiary pays and payer benefits. 2. Risks sit with those best placed to manage them. 3. Recognise some energy services/loads are essential - these need to be affordable and simple. 4. Recognise some energy services and products are flexible - these should be co-optimised with system operation to maximise benefit. 5. Participation in DER should be and opportunity for all, and obligation for none

We need a statement that talks about essential service, reciprocity (preconditon), trust (precondition)

**Summary of notes from workshop….**

**Vision**

A summary of key concepts describing the vision follows:

- Enabling, empowerment, engagement
- Access to DER benefits; balancing of benefits
- Nobody is left behind; all in this together; community, inclusiveness; multiple interests working together for the overall good
- Fairness
- Sustainability and self-sufficiency
- Resilience, support
- Interconnectedness of relationships, benefits, costs
- Systemic, holistic approach

Roles are constantly changing

# 1. Understanding what energy-users need and want

Below is a summary of the key concepts and discussion that came out of the sessions on looking at what energy-users need and want. Photos of each groups work can be found in appendix F.

- Essential service: reliable, secure, safe, affordable

- Access: to DER benefits and to technology (noting benefits need to be defined)
- Empowerment (noting this requires literacy and informed decision making)
- Choice: power of choice, choice to engage or remain passive
- Control, autonomy, agency
- Only pay for the services they need/want/use
- Simplicity: automation, things work as expected
- Trust: in the system, in the technology, in the market bodies and other players
- Fairness, equity
- Community, peer-to-peer trading; research shows that consumers *do* want to contribute towards the bigger picture
- Respect, mutual understanding, acknowledging multiple and diverse consumer groups
- Transparency, certainty and predictability

# 2. What challenges do energy-users face in having their needs and wants met and how do we overcome this?

Below is a summary of the key concepts and discussion that came out of the session exploring the challenges facing energy-users and shifts in thinking required to overcome the challengers. Photos of each groups work can be found in appendix G.

## 2.1. Challengers

- Lack of policy direction

- Too many market bodies and organisations

- Large-scale, long term, systemic/architectural change

- We're only as good as our weakest link

- Acknowledging there will be winners and losers

- Unintended consequences (e.g. EV users stop paying road taxes, which is shifted to non-EV users)

- A traditional 'patriarchal' control-and-command system is shifting towards a decentralised and democratised system (whether we like it or not) - our role is to design the architecture so that all this happens in a manner that achieves our shared vision

### 2.2. How can we overcome this?

- Enable collaboration and transparency between parties with commercial interests - the platform we build is critical to enabling this

- Collaboration (e.g. DEIP) to bring together many organisations, find a consensus, speak as a united voice - provide a united front on rule changes to AEMC (removes the need for government policy direction)
    - Collective approach to problem solving and decision making
    - Co-design reform

- Focus on the future
    - Build from the current state AND the future state AND make sure both visions meet in the middle (Sydney Harbour Bridge analogy)

- Provide support to those 'left behind'(a discussion was had around the need to better define this term)

- Communicating change with the community - why, what, who, how, when and providing a united voice. We are all leaders in our respective communities (e.g. business, renewables, networks, consumers, etc.) - what can *we* do to lead this?

# 3. Developing and agreeing the high level design principles which will guide policy reform

## 3.1. Group work

Participants were asked to brainstorm the overriding guiding principles to consider when designing future reform. Below is a summary of the key concepts and discussions that came out of the sessions with photos of each groups work pasted in appendix G.

- Consultation and communication
    - Co-design with consumers (With the consumer advocates and representative bodies AND with communities directly via media, etc.) by engaging early, authentically and with an ongoing dialogue
    - 'We'll do it *with* you, not *to* you'
    - 'Pass the pub test' - must be communicable, understandable and accepted
    - Open source information
    - Our approach will remain clear, simple and understandable
    - People understand how this fits into the broader context

- ○ Diverse consumer voice is fundamental to all conversations
- ○ All voices (consumers/individuals, communities, business, industry, regulators and operators) are important and must be acknowledged
- Fairness and equity
  - ○ To act in the long term interest of the community
  - ○ Ensure everyone has access to DER benefits (whether you actively participate or not)
  - ○ 'Choose your own adventure' - can choose to engage if they want to
  - ○ Fair distribution of benefits and costs
  - ○ Individual choice is not greater than the collective good (no harm done)
  - ○ We design for fair outcomes for all consumers (there was conversation that defining what is "fair" can be frustrating, but ultimately it has to pass the pub test)
  - ○ Shared responsibilities and accountability
  - ○ Causer pays - whoever receives a benefit pays proportionately to receive that benefit
  - ○ No one left behind (there was some discussion that some people may not benefit as much as others and it was important to have safety nets or complementary measures to address inequity)
- Risk management
  - ○ Risk being managed by those who are best placed to manage it (Noting that we traditionally build costs into the systems in order to conservatively manage risk. In future will require honest and frank communication with the community and politicians)
    - ■ Shared acceptance of uncertainty and risk - in order to remove inefficient and conservative costs
  - ○ Better understanding the trade-offs
- Security and reliability
  - ○ We will meet user needs safely and reliably
  - ○ No one is left behind for essential access to energy
- Net environmental benefit
  - ○ All new energy is clean energy
- Autonomy, empowerment and choice
  - ○ Ability to choose to participate or not (whatever their preference is)
  - ○ Provide a range of innovative and affordable options to move forwards
  - ○ Consumption is not a choice for many people (e.g. parents can't choose when they use electricity)
- Protection
  - ○ Consumer rights
  - ○ Consumer choice

- Access to affordable essential energy
- Affordable energy for all to access
- We'll put availability and affordability first