Implications for Consumers in an Age of Energy Market Disruption

Thank you for inviting me to speak today.

Before I start I'd like to acknowledge the very solemn occasion on which we meet, Remembrance day. It's a day when we reflect on the sacrifices made in all armed conflicts in Australia's name by the men, women and families alike.

[Pause]

Today, I've been asked to come here and talk about disruption. Whether it's closing Hazelwood, blackouts in South Australia or impacts to the Great Barrier Reef or Donald Trump being elected as president… recent events tell us it's the right time for a conversation about disruption.

And, as it should for energy, that conversation starts with the customer.

Firstly, let's face up to the horrid truth none is us likes hearing.

For all the wonderful things energy allows us to do, it's pretty unexciting for customers. In fact, it's god-awful boring.

Most people feel like energy *should be* a "non-event". I flick on a switch, the light comes on…that's it…

In a focus group we ran we asked customers to draw pictures to represent their energy retailer…here's what the drawings told us:

- We're not sure who our energy retailer is
- We're not sure what they do
- But I am sure they are after my money.

Before any other energy retailer gets on their high horse and thinks "but I'm different" – well, largely you're not. There was no discernible difference between retailers; to most customers we're all alike.

But the reality is energy is anything but a "non-event" in customers' lives.

- The Energy bills make up about 2.5% of the average weekly wage.
- According to *CHOICE*, electricity bills are rated the number one concern for households.
- And the cost of energy is going up. Since the start of the year wholesale electricity prices have increased in New South Wales from under $50 a megawatt hour to more than $60 in November.

And don't get me started on the "bill"… It's often complicated and doesn't make a lot of sense. The format of a concessions bill is regulated to the point you need to be an actuary to understand it - but then again, if happen to be an actuary you're probably less likely to be on a concession payments – so this may not work out.

So, what do you do if you're a customer and everyone looks the same? You make a decision based on price.

Now, you've made a decision based on price, but energy prices keep going up. How satisfied are you feeling?

Not very! In fact, customers are not just dissatisfied – they're angry.

They have no control. No control over their energy– but more importantly, no control over their wallets!

I'm not sure about you, but for me as a retailer, this customer situation is unacceptable.

So, how are things changing?

Here's where you pull out your bingo scorecard as I rattle off disruptions and innovations from battery storage, the Internet of Things, electric vehicles, BIG data, demand charging, dynamic charging and community solar schemes. The list goes on.

While we find all of this terribly interesting, it's not what drives most consumers. Instead, let's explore the sources behind disruption and then the implications for customers.

I think there are five major sources of disruption in our sector:

1. **Firstly – the social imperative – we need to build a world that embraces a zero-emissions future**

No ifs, no butts;

Climate change is not a religion. It's a science. The responsibility to leave the world in better shape for the next generation is one I take seriously, as does everyone at EnergyAustralia.

But how can I say that when I work for a company that will run the dirtiest power station in the country when Hazelwood closes?

Easily.

We need people inside and outside the system working toward a clean energy future. And our team at Yallourn are critical to the transition away from fossil fuels.

Speculation about Hazelwood's future ramped up in September. Since then wholesale electricity prices have increased around 12% in New South Wales and a massive 20% in Victoria.

It's bad news for consumers, with household budgets already under pressure.

But there is some good in this: it makes renewable investments more attractive – and we need more investment in renewable energy if we're to achieve zero emissions. And we need that investment fast.

Customers expect cheaper, cleaner, better energy. Every year. This has to be what we strive to give them.

When Hazelwood closes, Yallourn will still supply about 8 per cent of demand in the national electricity market. Removing that capacity without new generation ready to replace it could have diabolical consequences for electricity prices and energy reliability.

So, we need to accelerate the build of renewables into the system while we decommission coal-fired power stations.

And as we do this, it's simply not acceptable just to let these older plants run as they are. For so long as Yallourn is needed, EnergyAustralia is absolutely committed to investing in the plant and our people so our operations are as carbon-efficient as they can possibly be.

Just last year we completed a five-year maintenance program at Yallourn that lets us power an additional 100,000 homes without needing to burn a single additional lump of coal.

That approach applies right across our business. We are doing work right now that will see the Mt Piper plant in Lithgow become the most efficient power station in New South Wales by the end of this year.

And we already own the most efficient gas-fired power station in Australia, at Tallawarra in New South Wales.

That leads me to the second source of disruption…

2. The technology that will move us toward zero emissions

Not surprisingly, it's the small-scale solutions that get most of the headlines; electric vehicles, solar and battery technologies and the data control systems linking them together.

Add intelligent software and customers can use their energy how and when they want it. They can even sell it to their neighbours. Essentially there are potentially millions of mini power stations across Australia.

When compared to large-scale investments, mini power stations are arguably not the most efficient means of delivering cheaper, better, cleaner energy for all. But at least customers become more engaged in their energy future …more mindful about their energy choices. We cannot underestimate how important engaging customers in this future is.

Now onto our third source of disruption:

3. Regulation

Most regulation I see comes from a good place. But in the energy industry we deal with more than 60 regulators….And … I know you are going to find this shocking….but they are not always aligned.

Regulation can be good for consumers and the sector when it drives investment towards better, cleaner energy for all Australians.

But inconsistent regulation across geographies can have significant and unintentional consequences that add cost for retailers and therefore customers. Not only that, it can discourage investment…particularly when considering payback periods. If payback periods extend longer than the average lifespan of a politician you know your project just got riskier.

But this is good news for some. Wherever you have regulation that is inconsistent and creates uncertainty you have a potential source of disruption.

Needless to say regulation has my considerable attention and most players in the industry are "good citizens" who genuinely try to comply.

But there are very smart people out there working out how they can serve the needs of customers directly, without getting caught up in this very costly regulatory web.

It's used all too often but Uber is a great example of this. And I do expect the same thing to happen in energy.

Now our next source of disruption is the elephant in the room:

4. Market pricing

I'm talking about the wholesale cost of energy.
It makes up a quarter of the average household electricity bill. I wrestled with whether this was a source of disruption or an outcome driven by moving to a zero emissions future and the technology and regulation we'll need to make that happen.

At its most basic level electricity prices are pushing customers to change their behaviour and that drives innovation. For now, I'll consider market pricing as disruption…

And, the final disruption….

5. **The rise of the "prosumer"**

Again I won't spend a lot of time here as I think we are all very aware of what and who a "prosumer" is.

We are definitely in a new age of product and service development and marketing. The traditional media channels are not as strong as they once were – thank god – and word of mouth or more aptly – the power of social – comes into its own.

Today, energy customers not only consume electricity, they can sell it - using their social networks. As this trend takes off we'll see at the start a very inefficient web of "prosumer" networks causing all sorts of disruption to the grid. But given the disruption of market pricing, I believe this macro trend will find a home in energy….and whilst it will be a slow burn, it will eventually become more efficient and cannot be ignored.

And that's it for sources of disruption.

So, in summary my main sources of disruption are

- **Building a world that embraces a zero-emissions future**
- **The technology that will move us toward zero emissions**
- **Regulation**
- **Market pricing and finally**
- **The rise of the "prosumer"**

Now, here's where things get interesting. How will customers react?

Well… It depends on the individual.

Let's leave aside "early adopters". I love early adopters. We need pioneers. But let's face it, they are not like most of us! For us normal folks, three simple drivers will determine how we respond… and they are not new!

- There's the desire to "do the right thing"
- Desire for simplicity, and
- the need for control

So, "**doing the right thing**" …

Doing the right thing can mean *actually* doing the right thing i.e. "I will do the right thing even when no one is looking". Or it may mean *wanting to be seen* to do the right thing.

Either way, customers will make choices based on what they perceive to be right or choices that can be seen to be right.

But does that determine which retailer a customer chooses? Sadly…not on its own.

Based on our research "doing the right thing" comes into play only once price and quality concerns have been addressed. We found around 46% of people agree that climate change is a serious issue and 42% would choose a clean energy solution if it was in their budget. But only less than 20% will be motivated to actually do something.

So there's the challenge…

It's up to retailers to make cleaner energy choices easy and more affordable. And this can be something very basic like acknowledging good behaviour when we use less energy. It will all help.

And just to put it out there…as an industry I think we have done a horrific job on this.

We need to encourage all customers to make better energy choices – and we need to avoid making better energy choices painful…or even worse, grounding the decision in fear.

Frankly, I applaud any provider that **positively** encourages its customers to make more mindful decisions towards better energy use.

Which is a good segue for my next motivator, **simplicity**.

In other words, "please don't make it hurt".

I am just over a year in this industry. When I look at how we construct and communicate energy plans and how we talk to customers it is little wonder retailers aren't trusted.

I don't believe we're like that deliberately. In many cases we are trying to do the right thing.

I keep hearing it said we need "cost reflective pricing". But why would we ever want to expose a normal human being – someone who has a real life – to our supply chain complexities? Are we mad? What other industry forces this on its customers?

Fortunately, disruption can help shake us out of bad habits. With smart meters new plans are emerging. Decisions are becoming easier and products are being packaged with the philosophy of "energy as a service", rather than energy as a "cost reflective" tax!

If you think about how this plays out into future disruptions, this is where IoT comes into its own. As it stands today, IoT services are far from simple – I know because I have them in my house. They are largely for geeks, of which my partner proudly is one these.

But as we move from the "IoT" to a "connected home" to heaven forbid a "thoughtful home", simplicity will start underpin home energy management decisions.

Bring it on, I say.

And finally we have **control**. And I think the need to feel in control will be the ultimate driver.

And in particular, control over my wallet and how much energy retailers are taking out of it.

At the moment wholesale electricity prices are going up…and yet your lights don't shine any brighter. Energy feels like a tax, not a service.

But there are ways around this. Solar was the first example. It's tempting to think its popularity is driven by an altruistic desire to "do the right thing". Largely, it was not.

In reality it's a need for customers to take control back. Any solar customer will be able to quote you their feed-in-tariff rate ahead of any other part of their energy bill and I would argue their mortages rates.

Batteries, "getting off the grid", "getting off the gas" and P2P energy all play to this desire for control.

And as prices become more volatile, control as motivation will dominate.

So really that's it from me….
Whilst we can play "bingo" with all the disruption out there, at the moment price dominates our choices. And this is the case because there still remains little difference between us.

But I do see change ahead. And what I believe will move us away from price alone will depend on:

- How strongly the social norming around "doing the right" plays out
- How simple we make decision making
- The extent to which we can hand control back to the customer, putting them in the driver's seat.

And speaking as someone who loves disruption, I say bring it on!

Thank you.