Australia’s energy challenge: the customer perspective

Introduction

So much has been said and written in recent years about Australia’s energy challenges that it’s not easy to summarise the customer perspective – or at least, the industrial customer perspective.

But that’s my job today: to offer a view on how energy-intensive manufacturers are responding to what has been described as a train wreck; a mess; a lost decade; and, one of the greatest public policy failures in Australia’s history.

And I promise not all of those comments were made by me.

What I thought I would do today is first spend a bit of time talking about conditions in global and domestic manufacturing. In doing so, I’ll make the case for why energy matters so much to manufacturing in general, but to Australian manufacturing in particular.

I’ll then talk about what Australia’s energy system looks like for manufacturers and how that is influencing investment decisions, not just amongst our existing manufacturers, but by global manufacturers seeking to grow their footprint in our region. Hopefully I can also bust a few myths about what matters to manufacturers, and what doesn’t, when it comes to energy.

Finally, I’ll make the case for putting the needs of the customer at the centre of energy policy decisions, and why creating mutually beneficial relationships between suppliers and customers will be essential to building an energy system that capitalises on Australia’s natural advantages, and which can underpin both future industrial investment, and growth in the energy sector.

But before I do that, let me briefly introduce Manufacturing Australia, so that you know whose perspective it is that I’m outlining.

Manufacturing Australia is an organisation run by the CEOs of Australia’s largest, Australian-headquartered, manufacturing companies

Most of those companies are energy intensive manufacturers. That’s not an accident: its an outcome of Australia having enjoyed more than a century of competitive advantage in abundant, diverse and affordable energy.

Manufacturing Australia’s member companies operate around 300 plants and smaller facilities around Australia, providing direct and indirect employment to about 250,000 people. They also have a growing international footprint, with operations in around 30 countries globally.

One of the great things about manufacturing plants is that they are typically in outer suburban and regional centres, where they provide stable, long term, skilled and well paid jobs. These are the kind of jobs around which you build communities, you establish ancillary businesses and you raise families.

If you think I’m labouring the jobs point, can I impress upon you just one thing today:

In the manufacturing context, what we have in Australia is not simply an energy problem. It’s a jobs problem, and its an economy-wide competitiveness problem.

Because ultimately, if you want Australian manufacturing jobs, you need competitively priced energy.

If you want manufacturing to continue employing one in five engineers in Australia, you need competitively priced energy.

If you want manufacturing to continue contributing roughly a quarter of Australia's private R&D expenditure, you need competitively priced energy.

I want to see Australia secure its next generation of manufacturing employment; to attract investment from domestic and international manufacturers alike; and to create the conditions where our manufacturers can grow domestically as well as internationally.

But to do that, we must solve the energy challenges that are being debated today: challenges of intermittency; of security of supply; of market competitiveness and of high prices.

That's our shared challenge, and there's a lot at stake.

Manufacturing conditions

So, let me spend a few minutes talking about conditions in the manufacturing sector – both globally and at home - before we turn our attention, in more detail, to energy.

Let's look first at global conditions.

So far this year the main performance of manufacturing indexes across the OECD have painted a picture of a resurgent manufacturing sector, struggling to keep up with demand as economic conditions improve.

This is demonstrably the case in Germany, Canada, France, China and – as we'll discuss later – the United States.

And despite what you may read, hear or think, it's also the case in Australia.

Demand in most sectors of Australian manufacturing is strong. The most recent Performance of Manufacturing Index shows the sector expanding at its fastest pace in 15 years.

So, the first myth we can bust is that there is no demand growth in Australian manufacturing.

The second myth we can bust is that Australian manufacturers are not globally competitive businesses.

It's true we have faced significant challenges over the past decade: the GFC, a dollar above US parity, a surge in illegally dumped products and rising input costs to name a few.

It's also true that some businesses haven't survived those challenges.

But those businesses that weathered the storm – and emerged stronger for it – did so because they are well run, because they restructured and re-tooled, because they innovated, and because they made hard decisions to reduce costs and remain competitive against imports.

I believe strongly that if you manufacture at scale in Australia and remain internationally competitive, then you are fundamentally good at what you do, and you have identified and exploited core competitive advantages: it might be in your products, your supply chain management, the way work is done inside your plants or your approach to R&D.

In Australia then, our challenge isn't that our manufacturers aren't good businesses. Indeed, most manufacturers I deal with are quality businesses with strong balance sheets and an appetite to invest.

And yet, while elsewhere in the world, the economic conditions I've just described are leading to exactly what you would expect: waves of new capital investment in manufacturing, similar levels of investment are not occurring in Australia, either by local or international companies.

So our challenge – and it is a challenge for the nation rather than for companies themselves – is that our manufacturers ***are*** growing, but increasingly they're not growing ***here***.

Between 2011 and 2015, manufacturing's share of Australian companies' direct foreign investment grew by 11%, second only (and by a narrow 0.2%) to the financial services sector as it sought to grow in Asia.

More than twice as many of our manufacturers have direct investments overseas than Australia's second most internationalised industry – wholesale trade.

But what's relevant to today's discussion is not just how much manufacturers are investing overseas, but where they are investing, and why.

The answer to the first question, increasingly, is the United States. And the answer to the second question, at least in part, is energy.

The United States has long been the single largest destination for outbound Australian investment, comprising more than a quarter of all Australian overseas investment last year, and with total cumulative investment more than seven times what Australia has invested in China.

Today, manufacturing makes up half of Australia's direct investment in the United States.

There are many drivers of the resurgence in US manufacturing, but unquestionably the abundance, diversity and affordability of energy – underpinned by the shale gas revolution – is chief among them.

In his 2012 State of the Union address, then President of the United States, Barack Obama, made energy independence and value adding through manufacturing a major theme. He said:

> "We have a supply of natural gas that can last America nearly 100 years, and my Administration will take every possible action to safely develop this energy. Experts believe this will support more than 600,000 jobs by the end of the decade."

In fact, they vastly exceeded that goal. US Department of Labor statistics show that between 2010 and 2018 more than a million manufacturing jobs were created in the United States. Reuters analysis attributes about two thirds of the manufacturing job creation to foreign direct investment.

The fact is, seizing its energy advantage has helped to make the United States arguably the best place in the world to be a manufacturer today, so it's not surprising that Australia's best manufacturers are getting in on the action.

On one hand, this is a very good thing.

Done right, taking an Australian manufacturing company global can deliver compelling results.

It can build more resilient businesses, open up new and diverse markets and create "hidden" exports of Australian know-how.

Today, for example, Australia's world class engineers, plant designers and operators are building and running manufacturing plants around the world from right here in Australia.

We should absolutely celebrate that.

In my own career, taking an Australian manufacturing company global was one of the highlights. After all, who doesn't love seeing Australian businesses competing with, and beating, the world's best?

But it's also true that the decision to pursue growth through direct investment overseas, rather than through exports, is often borne out of a frustration shared by many Australian manufacturing CEOs: namely, that the business case for building new manufacturing plants in Australia too often simply doesn't stack up.

We've seen this before, of course, for example when industries that relied heavily on comparatively cheap labour conceded competitive advantage to the developing world.

What makes it different this time is that for Australia, just like the USA, energy is **our** competitive advantage – or at least it should be – and it's at this point that I will turn my attention to the manufacturing perspective on Australia's bizarre, needless and largely self-inflicted energy "crisis".

Why energy matters to manufacturing

There is a fundamental feature of manufacturing competitiveness that is especially relevant here.

Around the world, manufacturing flourishes in countries that identify their advantages, and then exploit them.

As I mentioned, in some countries an advantage is cheaper labour; in others it might be access to isolated markets or particular strengths in applied engineering.

Australia has several advantages – the quality of our tertiary education system and research capabilities is one; our proximity to growing Asian markets is another.

But for the past century or so, perhaps our greatest advantage in global trade has been the diversity and abundance of our natural resources.

That resource endowment has afforded us globally competitive energy prices and given us an envied opportunity to add value to our resources through downstream processing industries.

Unsurprisingly, we have clustered many of our internationally competitive industries around those resources, not just for mineral exports – as enriching as that has been – but also for value adding in our industrial and agricultural supply chains.

It may be an inconvenient truth for some, but we have an energy intensive economy in Australia.

In that context, the transformation of Australia's energy system over the past decade is not simply an energy issue: it is a profound upheaval of our economy and a challenge to our international competitiveness.

In the space of not much more than a decade, Australia has conceded the lion's share of that competitive advantage through short-sighted energy policy that does the opposite of what President Obama captured in his energy vision in 2012.

Here, we have lost sight of the importance of value-adding to our resources through various supply chains in manufacturing, agriculture, mining and services industries, and instead measured the value of energy only as a commodity itself.

So, what does Australia's energy system look like for manufacturers today?

It won't surprise anyone in this audience to know that it's pretty tough.

High costs and declining energy security are materially damaging the ability of local manufacturers to compete against imports, impacting both potential and current manufacturing investments.

Already, significant investments in energy-intensive manufacturing, by Australian and international companies, have gone offshore because of uncertainty about energy security or high prices, while local investments or expansion opportunities have been put on ice or rejected.

Worse, existing manufacturing operations are under threat, with the business case for undertaking essential re-investments and plant maintenance increasingly scrutinised by boards and executive teams.

Plant closures and job losses as a result of high energy costs are, frankly, inevitable.

The key questions now are whether we can turn the tide; how quickly we can do it; and whether we can provide a bridge from where we are now, to where we need to be so that we don't lose critical capabilities and industries during the transition.

Despite that dire assessment, believe it or not I'm an optimist. I think we are at a tipping point from which we can recover, and with the right mindset, I hope we can have our cake and eat it, too.

Let me briefly outline why:

Let's start from my proposition that abundant and diverse resources – both renewable and non-renewable – are amongst Australia's best competitive advantages in global trade.

If you accept that, then Australia *should* be uniquely positioned to solve the "trilemma" of energy security, emissions reduction and internationally competitive prices in ways that few other nations can.

Of course, right now we're not. In fact, I would argue that for most of the past decade we have demonstrably failed to achieve any of the "trilemma" objectives:

1. Prices have surged relative to other OECD countries.
2. Energy security – in both gas and electricity markets – has eroded in many parts of Australia.
3. Emissions reduction has been poor by international standards.

So, the first thing we need to do, collectively, is acknowledge that the previous approaches have failed.

Hopefully that allows us to draw a line under some of the ideological, winner takes all, mindsets – on all sides of the energy debate – which have stymied progress towards a solution that should be based on compromise, not consensus.

Those who insist that our energy generation mix needs to change overnight do as much damage as those who insist it doesn't need to change at all.

Similarly, those who insist that a market that delivers windfall profits to energy producers while putting customers out of business is proof the market is working, do just as much damage as those who see the solution as depriving energy producers the ability to run profitable businesses.

The truth is, we're not all going to agree, and that's ok. But refusing to compromise is what stops us from achieving our objectives.

The second thing we need to do is define what success means.

To do that, I would encourage governments to consider what an Australian energy system would look like if it were being created anew.

From the customers' perspective, it would have the following characteristics:

1. It would be technology agnostic and value a diverse energy mix, with different generation technologies competing openly without subsidy or preferential treatment.
2. It would guarantee security of gas and electricity supply for domestic customers, with a reasonable buffer, in every jurisdiction.
3. It would favour open markets, but closely monitor market concentration and competition – a necessity in the absence of import competition.
4. It would pursue emissions reduction proportional to Australia's international role, but without going further than our key competitors in global industrial trade.
5. It would be unambiguous about targeting energy prices in the lowest quartile of the OECD,

Let me pause on that last point for a minute, because whenever manufacturers talk about energy price targets, it is routinely misunderstood and misrepresented.

I don't think there's anything controversial about suggesting that a country with some of the world's best wind, solar, gas, coal, uranium and other mineral resources should enjoy energy prices in the lowest quartile of the OECD.

Further, I don't see any reason why we can't achieve that while still delivering healthy economic returns to energy producers: our resource endowment should see us able to do both.

In fact, I would argue that refusing to set ambitions for price stops us from ever measuring the true cost of our own policy, regulatory or market failures.

So, my challenge to energy policymakers and regulators is this: if you are serious about affordability, set a target for energy prices, just like we do for security and emissions.

There's no point having a perfectly designed and engineered energy grid if customers can't afford to use it.

In global manufacturing terms, internationally competitive prices means something in the order of \$60-\$70 a megawatt hour for electricity and \$6-7 a gigajoule for gas. And if you think that sounds low, remember that if we chose to only benchmark against the United States those numbers would be more like \$40-\$50 for electricity, and \$3-4 for gas.

That is what we're solving for in the affordability part of the "trilemma".

So, having worked out where we want to be, the third thing we need is a transition plan to get there.

In the short term, the fact is that will involve difficult, but necessary, government interventions in the energy market.

None of these interventions are perfect, all of them will have intended and unintended consequences, but they are needed in the short term to avoid substantial demand destruction.

The purpose of intervention should not be to prevent change, but rather to carefully manage the pace and nature of change in the energy sector so that it does not cause irreparable damage to the Australian economy.

Changing too fast will see Australia pursue the wrong solutions by adopting “bleeding edge” technologies and will lock in internationally uncompetitive prices.

We shouldn’t be a “first mover”, but rather a “fast follower”.

Changing too slowly will see Australia miss international targets, have poor flexibility in the energy system and see operators stuck with stranded assets, for which we will all bear the costs.

But intervention isn’t the long-term solution, and the sooner we can restore proper market function and rid ourselves of energy market intervention, the better.

On the subject of the market structure and function, let me be clear: privatisation and integration of Australia’s energy assets has delivered significant benefits to customers for many years.

However, recent consolidation in the energy market has been to the detriment of customers.

But we are where we are. Our approach shouldn’t seek to wind back the clock, but instead to focus on the current challenges, with clear objectives around price, security and emissions reduction.

Governments and regulators should resist further market concentration in the energy sector and actively encourage new entrants.

More energy supply, and more energy suppliers, is what will deliver lasting benefit for customers and create a better energy industry.

Ultimately, if we are to avoid prolonged and unpredictable government interventions in the energy market, we will need to build mutually beneficial relationships between energy suppliers and customers.

It’s on that topic that I’d like to spend the last few minutes of my speech today.

The customer – supplier relationship

I spoke before about the United States seizing its energy advantage to create a manufacturing resurgence.

There is of course much more to that story than just a comparison of input costs.

What I observed in two decades of running energy intensive businesses in Australia and the USA was that the most successful partnerships were always based on a mindset of mutual benefit.

This wasn’t only in the context of energy: it was also evident in employee-employer relations, and in relationships with the many suppliers and customers to any large industrial operation.

As manufacturers, when we think about building new plants or refurbishing existing ones, the first thing we have to do is talk to our customers.

To be successful, we need to make products our customers want, at prices they can afford. If we can't do that, everybody loses.

We need to understand the drivers of competitiveness in our customers' businesses, and how we can help them be more successful, through the good times and the bad.

And believe me, having spent most of my career working with customers in the agriculture and resources sectors, I've seen my share of good and bad times.

In turn, our customers have understood that in order to keep investing in our operations, in our R&D and in our product improvement, we need to run profitable businesses ourselves.

And yet, too often in Australia's energy debate of the past decade, we have lost that mindset. The United States hasn't, and I believe that mindset, more than any other factor, is what has underpinned its energy transformation.

So my challenge to the energy sector is this: start by asking yourself "how can I make sure my customers are successful, so that I will be successful?"

My challenge to the manufacturing sector is the same: ask yourselves "how can I make sure my suppliers are successful, so that I will be successful?"

I have used the concept of "my share of the solution" and "your share of the solution" throughout my career.

In this context, there is a role for customers, suppliers and the governments alike.

The manufacturers' share will involve adapting to an energy market in which the days of being a passive "set and forget" energy customer in Australia are over:

- We need to make long term commitments to our suppliers that can underpin investments.
- We need to co-invest where it makes commercial sense to do so.
- We need to change how we procure energy and invest in skills and capabilities to do that.
- And we need to help the energy sector improve its relationships with communities, landholders and governments, so they can more easily see the benefits to them.

The energy sector has to bring it's share, too:

- Adopt a long-term mindset, recognising that supporting customers through transition can deliver value through investment cycles.
- Understand that co-investment will only happen where it delivers long term commercial benefit and represents the best use of manufacturers' capital.
- Get to know manufacturers' businesses better, their import competition and what you can do to ensure they are still in business when energy prices in Australia come down, as I suspect they will in time.
- Appreciate that we are as excited about new and changing technologies as you are, but that a transition that occurs too fast, or compromises the integrity of Australia's energy system, will always be a threat to manufacturing competitiveness.

Finally, governments have their share, too:

- Don’t abandon hard fought principles that the best outcomes for consumers are delivered through competitive markets, functioning effectively. Interventions should be temporary, carefully considered, and intended to get markets back on track, not replace them.
- If we have a trilemma, let’s solve all three, not leave price to be an output of solving for emissions reduction and security.
- And finally, give your political opponents enough room to work through and solve complex problems with practical solutions. If every difficult decision is met with a “gotcha” or “I told you so”, then nobody will make difficult decisions at all.

I believe that the sooner we get back to a mindset of mutual benefit in Australia’s energy debate, the sooner we can get through a necessary, but challenging, period of government intervention.

After all, it is not governments that provide investor certainty, it is customers.