## Morgan's Business Breakfast - 21 August

## CEO, Senex Energy Ian Davies speech: Energy is Prosperity



Thank you, Brian.

And thank you for the invitation to speak today at this packed Morgans Business Breakfast.

Ladies and gentlemen, this is the second time I have been invited back in as many years and I am honoured to be up here addressing you all again today.

This morning I'm here to talk about energy, and how energy drives prosperity.

Why?

Energy is how we make things,

Energy is how we move things,

Energy is how we warm our homes and prepare our food.

Energy IS prosperity.

And, given the fact that current Governments and some parts of society don't appear to have any regard for history, let alone physics, let's start with a bit of history.

The history of the world and mankind can be traced alongside our ability to harness and convert energy for productive use.

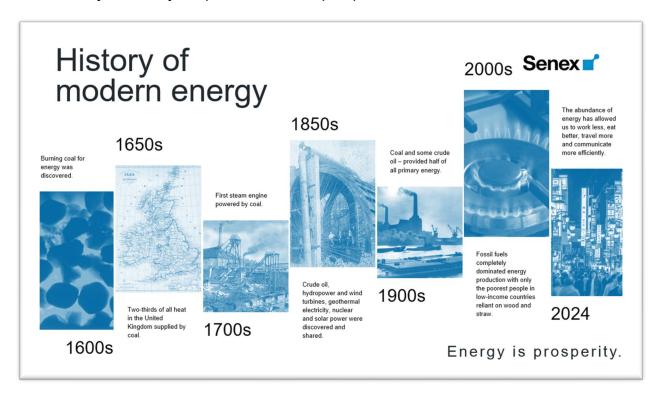
Over the last century and a half, part of our global population learned how to harness an abundant resource at our feet known as fossil fuels and create prosperity the likes of which the world had never seen.

But before that time, progress was slow.

For centuries, the only energy sources humans relied on, besides their own labour, were fire and animals – to haul loads, plough fields and draw water from wells.

Most of society was involved in agriculture – a labour-intensive task. An acre of wheat took 56 worker hours to farm and produced just 15 bushels.

Life for many was fairly simple, but far from prosperous.



It wasn't until the early 1600s when burning coal for energy was discovered.

By the 1650's burning coal supplied two-thirds of all heat in the region now known as the United Kingdom. And around 70 years later came the discovery of natural gas for light and heat.

By the early 1700s, coal gave us the first steam engine – the iron workhorse which powered early industrialisation.

The shift to fossil fuels drove the industrial revolution. This saw significant changes in agriculture, manufacturing, mining, transportation and technology, and had a profound effect on the standard of living and prosperity.

After 1850, energy conversion picked up tempo even further, giving us new energy sources and the start of large-scale globalisation. Crude oil, hydropower and wind turbines, geothermal electricity, nuclear and solar power were discovered and shared.

By the 1900s the global share of fossil fuels – coal and some crude oil – provided half of all primary energy, with traditional fuels such as wood, charcoal and straw, yes straw, accounting for the other half.

Access to abundant and reliable fossil fuels meant a portion of society was prosperous and urbanising, but the other half of the world were still living in extreme poverty.

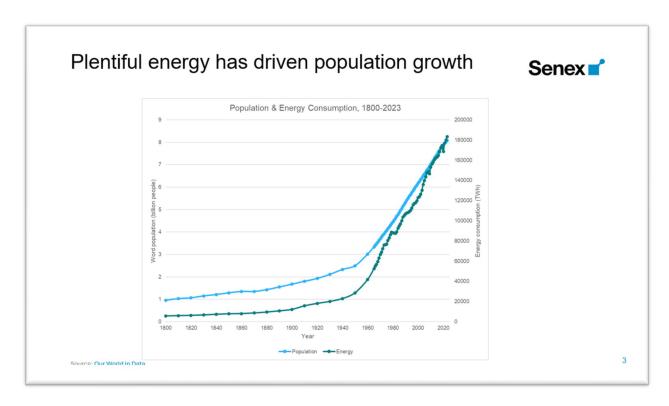
By the year 2000, fossil fuels and new technologies had completely dominated energy production with only the poorest people in low-income countries still reliant on wood and straw.

The rise of fossil fuels had seen the number of people living in extreme poverty drop from around half the global population to less than 10%.

As we created more energy from more reliable and affordable sources, prosperity grew, and so too did our demand for energy. And that continues to grow today.

The abundance of energy has changed every facet of human existence. It has allowed us to work less, eat better, travel more and communicate more efficiently.

Plentiful energy has contributed to materially better living standards, increased life expectancy and population growth.



For context – the global population grew from 1 billion in 1800 to 1.6 billion in 1900, then to 6.1 billion in 2000 – now tipping over 8.1 billion just 24 years later.

Total energy consumption has grown in much the same way.



On a per capita basis, global energy consumption increased 160 per cent from 28 gigajoules in 1900 to 73 gigajoules in 2000.

The twenty years after 2000 saw an additional 23 per cent increase, up to approximately 90 gigajoules per capita by 2020.

As you may have gleaned from the slide behind me, energy usage is not uniform and dominated still by wealthy countries.

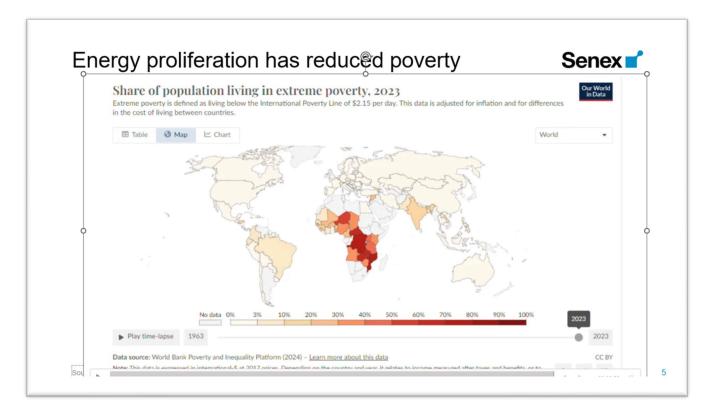
We now have unprecedented amounts of energy at our disposal, drastically improving our standard of living. Something that so many of us take for granted.

Take a look around this room – nearly everything that is part of our daily lives relies on energy – and more specifically – fossil fuels.

The chair you're sitting on, the floor you walked on, the glass you're drinking from, your clothing, the steel in this building and how you travelled here today – are all produced in some way thanks to fossil fuels.

Most importantly, the food – the fuel – you're eating this morning has been produced using natural gas. In fact, fossil fuels have had a profound impact on food production.

They have powered the machinery, transportation and irrigation pumps associated with the food supply chain. And, perhaps most importantly, fossil fuels have been used to produce fertilisers and agrochemicals for food production.



The UN's Food and Agriculture Organisation estimates the worldwide share of undernourished people has decreased from 65% in 1950 to 9% in 2023 while the population has tripled. This is in large part thanks to modern agricultural practices powered and underpinned by fossil fuels.

Without fossil fuels we could not supply 90% of humanity with adequate nutrition.

It's hard to underplay just how important ammonia-nitrogen-based, that is nitrogenous, fertilisers – produced using natural gas – have been to the explosion in productivity of modern agriculture.

The average vegetable and wheat crop requires more than 100 kilograms of fertiliser per hectare.

Without nitrogenous fertilisers and the gas used to make it, it's no exaggeration to say that billions of people would starve – in fact half the global population or some four billion souls.

The facts are that without efficient, reliable and affordable energy inputs, food production would plummet and prices would rise to exorbitant levels out of reach to most of the global population.

So, you've been patient while I've served up a history lesson – but what about today?

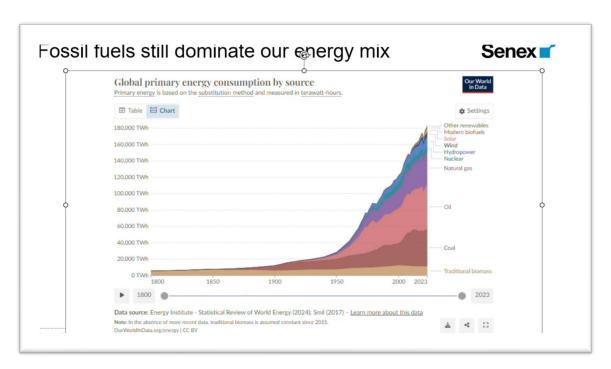
Surely today things have changed.

After all, it's 2024 – we are living in an extraordinary time.

We're living through a generationally important 'energy transition'.

I prefer a complex global energy transformation.

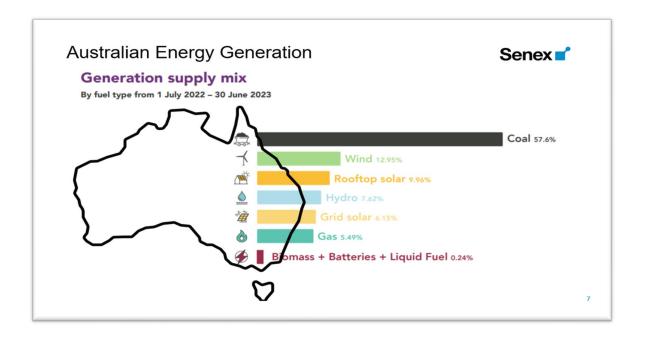
The challenge and complexity ahead should not be underestimated – nor should the pathway and energy required to get there.



Despite what you might hear or read in the media, the fact is that 90 per cent of our primary energy sources in Australia today still come from fossil fuels.

Forty years ago, that number was 94 per cent.

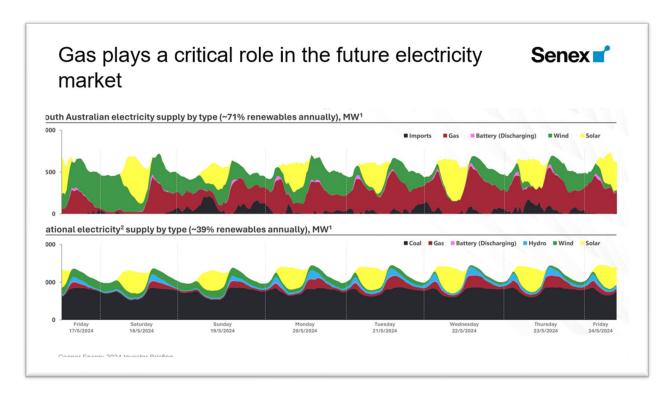
After more than three decades of striving and political manifesting to will the clean energy transition into existence, fossil fuels still deliver the vast majority of primary energy for this country.



Now let's talk about electricity generation, and specifically electricity generation on Australia's east coast which is incredibly important to everybody here.

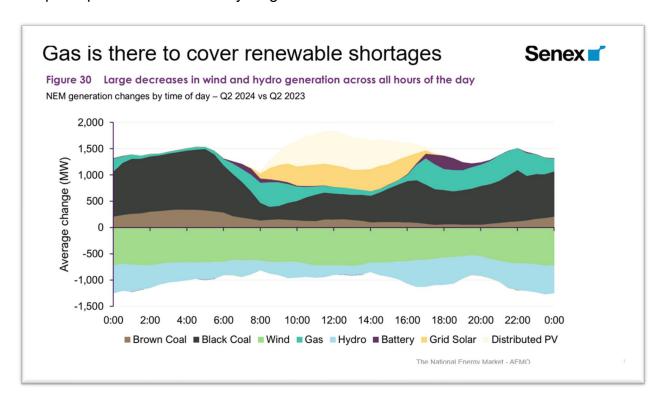
In respect of generation fuels, on average – and the term 'on average' is important here – coal supplies 57 percent, renewables supply 37 per cent and gas supplies the balance. Again, it's important to labour the term 'on average' because the energy mix includes intermittent generation sources that don't always perform as expected.

When the wind doesn't blow, the sun doesn't shine, water doesn't flow, or indeed coal fired power station units explode like we saw at Callide here in Queensland, the energy mix looks very different.



These excellent charts – and thanks go to Cooper Energy here as I shamelessly stole them from their recent investor presentation – show one week in May and the huge variability of wind, solar and hydro. And, they show the reliable role that coal, and gas in particular, play in picking up the load to keep our lights on and our homes warm.

The chart at the bottom shows the national picture, with the chart at the top the renewables-heavy South Australia. You can see the reliance of gas – shown in red – to pick up the load when everything else isn't there.



Just last month, the penetration of renewables in the grid fell to 10.2 per cent, and in fact, the entire second quarter saw wind and hydro perform well below expectations, reducing by more than one thousand megawatts of generation. This chart takes a minute to get your eye in. It's a change from Q2 '23 to Q2 '24. The area below zero x-axis is generation that was there last year, that wasn't there this year.

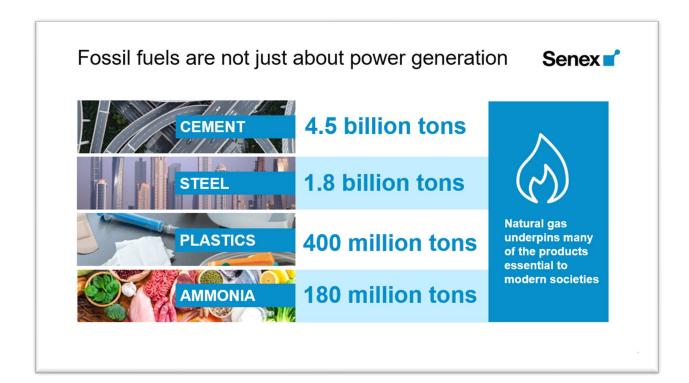
Despite this underperformance, we continue to see disproportionate investment in these technologies and efforts to run coal and gas out of the system at alarming pace.

Make no mistake – these energy mainstays play a critical firming role in our system – and a role that will be needed well into the future.

And gas does much more than generate electricity.

Gas is used by 40 per cent of our industrial sector for high heat production and feedstock to make building materials, fertilisers and chemicals.

Let's consider for a moment what a world without fossil fuels would look like.



Without fossil fuels – and that includes natural gas – each year, the world could not produce

- the 4.5 billion tons of cement for roads and runways;
- the 1.8 billion tons of steel for buildings and cars;
- the nearly 400 million tons of plastics to make hospital equipment and sterile packaging;
- and the 180 million tons of ammonia used in fertilisers to grow food to feed our global population.

These products enable our modern way of life. Australians and the world needs natural gas – and they are going to need gas for a very long time.

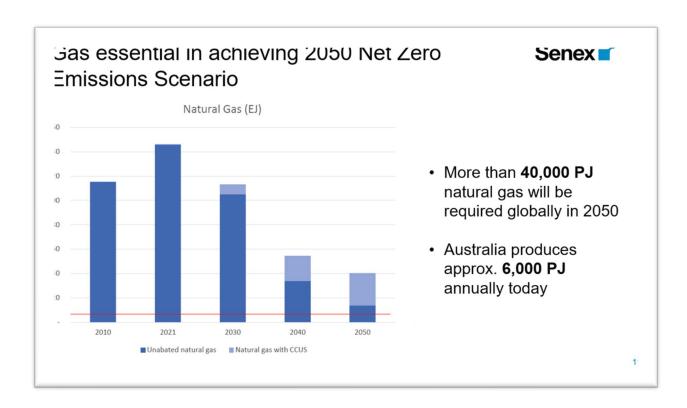
That's why Senex is in the gas business.

We're here for our customers – for manufacturers, for households and everyone in between.

While other energy technologies are advancing, many are not sufficiently advanced, economically or at scale, to simply walk away from fossil fuels today, or in my view, any time remotely soon.

This is a matter of physics, not politics, or indeed fashion.

Simply put, fossil fuels – including natural gas – are essential to our standard of living, prosperity as a country, and in the transition to net zero, if indeed that is at all possible.



The essential role of natural gas – not only in the Australian economy, but for our Asian allies and around the world – is undisputed by experts both in Australia and abroad

Wood Mackenzie estimates that global gas demand will peak in 2040 at over 176 thousand petajoules.

Even the most bearish scenarios like the International Energy Agency's Net Zero Emissions Scenario assumes a requirement for over 40 thousand petajoules of natural gas globally in 2050.

For context, Australia – a global LNG leader – produces around 6 thousand petajoules today.

My view is that the role of natural gas in our system will be far more enduring. As the global population continues to grow, especially in Asia, there is a maturing middle class with reasonable standard of living expectations.

People expect their lights and appliances to switch on, day or night.

People expect to have access to affordable food.

People expect to maintain – and improve – their living standards.

And people expect to feel safe in their nation, confident that national and energy security is not compromised.

Natural gas is a key enabler of all of these things, and the fact is the technologies are not there yet to replace it in many applications.

And so I expect natural gas will be around for a long, long time to come.

Continued demand for gas is undeniable in my view, BUT, demand is just one side of the equation.

It's the ability to supply that's really contested in Australia today.



And – thanks largely to Government inaction and intervention – in a few short years, we won't have enough gas supply in Australia to meet our demand.

Like Groundhog Day, we have heard repeated warnings from the Australian Energy Market Operator calling for urgent investment in new supply. And like Groundhog Day, our Government has buried their head in the sand, instead tying themselves – and our industry – in a monumental knot of intervention.

Thankfully, and after some long and hard advocacy by industry and users alike, the Federal Government agreed that we do need continued investment in new gas supply.

But now there needs to be action, not more talk.

There has never been a more important time to get the policy settings right and bring more gas online – and quickly.

Sadly, regardless of pace, more local supply simply won't be enough to avoid these forecast shortfalls, in my view.

We must also urgently invest in new infrastructure and pipelines and a strategically-positioned LNG import terminal in the south-east to get supply to where it is needed most, when it is needed most. Now, while I've been up here reminding you about the

importance of continued investment in fossil fuels like gas in our modern world, I'm certainly not suggesting we pick winners.

We need all forms of energy to feed the insatiable demand that exists, to drive improved living standards and to enable our complex energy system transformation.

It's about getting the balance right so we can continue to meet our societal expectations around energy being affordable and reliable, and at the same time, furthering environmental and net zero aspirations.

Senex operates in a region of Queensland that has thriving solar and wind energy industries coexisting side by side our natural gas sector. That's a great thing.

And I'm proud of the role Senex is playing in delivering more domestic gas to power our factories and bolster the east coast energy grid.



In 2022, Senex announced plans to invest more than \$1 billion to boost our natural gas supply to the domestic market to 60 petajoules a year by the end of 2025.

That's a material amount of gas and represents more than 10 per cent of annual east coast domestic gas requirements.

Despite the challenges presented by the Federal government's unprecedented gas market intervention over the past 18 months, Senex continues to move forward with our expansion plans and we are delivering what we promised. In fact, this expansion will be 75 per cent complete by the end of this year.

It will deliver sorely needed new gas supply to a mix of manufacturing and energy retail customers through long term gas sales agreements until at least 2035.



Our gas will power Australian customers, like:

- CSR who makes bricks and plasterboard;
- One Steel and BlueScope important Australian steelmakers;
- Orora who make glass bottles and packaging; and
- Energy retailers including AGL, Engie and EnergyAustralia who provide houses and businesses with the gas they need to keep running.

The 151 petajoules from just these gas sales agreements equate to enough gas for almost 6.5 million households in a year. And that's just the beginning of our supply commitments.

Importantly too – this expansion will mean a further \$200 million invested into the Maranoa and Western Downs regions in western Queensland.

Senex is playing its part in delivering essential energy that Australia and the world needs – something that as CEO of Senex for the last 14 years, I'm immensely proud of.

Most of my professional life has been spent building this company and I'm so proud of the role we play in our society and what we have been able to deliver.

It is extraordinarily fulfilling to see how far we've come from a small oil explorer with one employee to a gas producer supplying more than 10 per cent of the entire east coast.

As Brian mentioned in his introduction, I recently announced I am stepping down as CEO of Senex.

After a hard-fought battle to overcome government intervention, securing approvals and gas contracts, and getting our projects galloping, Senex is in the best position it has ever been with a clear runway and incredibly bright future.

It is likely this will be my final public address as CEO of Senex, and so it's fitting to be talking on a topic that I am so passionate about, and that I share with my successor and long-time Operations Chief, Darren Stevenson, who is here today.

Having worked with Darren now for more than a decade I have full confidence he will continue to drive Senex forward with the same passion to fulfil our purpose of delivering essential energy for life.

So ladies and gentlemen, to conclude, just as energy has driven our progress and prosperity to now, it will continue to in the future.

But how we choose to invest in energy, and the policy settings our governments impose, will define the path of our complex energy transformation.

Australia is in the box seat to take advantage of the opportunities this transformation can bring. We must continue to invest in stable, reliable and affordable energy like gas that has driven prosperity for centuries, and the infrastructure to transport it to where it's needed most.

And we must invest in new, low or no emissions energies in a way that also supports our economy, not works against it.

Our resources have underpinned the economies and rising living standards of Australia, and our neighbours and allies in Asia for over half a century. We are the lucky country, but let's not forget that this lucky country is built on the back of resources.

I will always be proud of the role our industry has, and will continue to play, in our prosperity as a nation. Everyone here, and every Australian should be proud of it too.

Thank you – I would be happy to take some questions.

