## **APPEA CONFERENCE AND EXHIBITION 2022**

## CHAIRMAN'S ADDRESS – APPEA CHAIR IAN DAVIES

## TUESDAY, 16 MAY 2022

It is my great privilege to be Chair of APPEA at such an exciting time of challenge and opportunity.

As you've heard, the theme of this year's conference is *Positive Energy for a Changing World*.

We not only face a changing world – it is a volatile world, characterised by uncertainty.

A world in which the long stretch of global peace and rising living standards that we have enjoyed since World War Two is threatened.

We are now in the middle of an energy security crisis ignited by Russia's invasion of Ukraine.

But this is a crisis that has been building for much of the last decade through underinvestment in new, and diverse, energy supply sources.

While the crisis may have started in Europe, the ramifications are increasingly global.

And they are economy wide – affecting power generation, transport, industrial production and food production.

Above all, they affect people, especially the poorest in our global communities, who are the most vulnerable to rising food and energy prices, and other basic living expenses.

The record high oil, gas and coal prices we are experiencing globally are good for no one.

Surging gas and naphtha prices have led to shutdowns of ammonia and urea plants across Europe.

Natural gas accounts for 70 per cent of global ammonia production – the basis for nitrogen fertilisers that have revolutionised agricultural productivity.

The price of urea – a nitrogen fertiliser – more than doubled between last September and March this year.

The CEO of Yara, one of the world's biggest fertiliser groups, warned of food insecurity, saying:

"For me, it's not whether we are moving into a global food crisis — it's how large the crisis will be."

Paper mills that provide packaging for everything from pizza boxes to furniture have shut in, along with steel furnaces, and zinc and aluminium smelters.

Record oil and gas prices are also shutting manufacturing in Asia, in particular, emerging Asia.

They are putting pressure on food and fuel prices to the point of social unrest – from Sri Lanka to India, Pakistan, Thailand and Indonesia, to name just a few.

Combined with the interruption to exports from Russia and Ukraine, record oil and gas prices are placing enormous stress on global supply chains, sending inflation skywards – and nations into retreat from our open global economy.

Russia and Ukraine combined account for just under 30 per cent of the world's wheat, 70 per cent of its sunflower oil and 5 per cent of its steel.

Russia is also a major global source of critical minerals for manufacturing, from vehicle batteries and computer components, to stainless steel and glassmaking.

And of course, Russia contributes about 10 per cent of the world's oil, meets more than 40 per cent of gas demand in the European Union and is the world's fourth-largest LNG exporter.

While natural gas accounts for about a quarter of global electricity generation, half the total natural gas produced today is consumed in sectors other than power generation.

These are the sectors that I talked about earlier – such as fertiliser, building materials, critical mineral processing, and the polymers used to make the plastics, clothing fibres and chemicals that are fundamental to the way we live.

These are sectors where renewables simply cannot replace oil and gas today.

To be clear, the world requires renewables to be successful; and it requires oil and gas to be successful.

To reach net zero, we need all forms of energy to work together.

In Australia, the renewed focus on manufacturing to mitigate against global supply chain vulnerability is going to need reliable, affordable energy supplies and feedstocks.

Just as Australia relied on a competitive advantage in energy over the last 60 years, we will need to invest in new, low-cost oil and gas supply sources – as well as renewable energy and energy-efficient technologies – to support the next generation of manufacturing industries.

A lot has been said in recent years about the competitiveness of east coast gas prices.

But the fact is that Australian customers will always pay less for Australian gas than our customers in Asia.

In April, the ACCC's LNG netback price at Wallumbilla was more than \$45 per gigajoule.

The average spot price in the east coast domestic market was around \$16 per gigajoule.

In April, equivalent benchmark prices overseas ranged from about A\$10 in the deeply liquid US market to A\$42 in north Asia and A\$46 in Europe.

While we are internationally competitive, there are still ways to put downward pressure on prices – prices that flow through the whole economy. Key to that is investing in more supply.

We remain a lucky country.

We have abundant gas resources – onshore and offshore.

But a key question is: will we be smart enough to unlock their wealth in support of our own domestic industries, and to generate export income for the nation?

Oil is also important when it comes to energy security, with around 75 per cent consumed in transport and 25 per cent consumed in other sectors of the economy.

Much has been said in recent years about building a 90-day oil stockpile to meet our International Energy Agency obligations.

As a net importer of oil and refined products, a better way to achieve oil security would be to encourage investment in new oil developments; get new, material oil provinces, such as the Bedout Basin in Western Australia, up and running; and expand existing basins where possible.

Combined with the investment already made to keep our two remaining Australian refineries open, this would better enable us to contribute to a global response – and provide far greater security for Australia – than a 90-day stockpile.

Australia currently imports around 90 per cent of its refinery feedstocks and 60 per cent of its refined petroleum products.

About 80 per cent of our own production is exported because of oil characteristics and the distance to east coast refineries.

If this picture is not complex enough, consider the seismic demographic, geopolitical and economic shifts taking place globally.

Asia – the continent on our doorstep – will account for more than half of global GDP by 2030.

By 2050, the global population will expand by 2 billion.

Most of this population growth will be in developing Africa and Asia, where more than 770 million people still do not have access to electricity.

These developing countries are striving to lift their populations out of poverty and clean up air pollution.

They want the same high standard of living that we enjoy in Australia.

The challenge is that meeting their demand for energy, affordably and reliably, must occur at the same time as we invest in the huge task of decarbonising our energy system to net-zero emissions by 2050.

But in 2021, global greenhouse gas emissions from energy were the highest ever – above the previous record set in 2019.

Coal-fired power plants met half the increase in global electricity demand in 2021, with total coal generation also reaching an all-time high, up 9 per cent last year.

As gas prices rose, we even saw some countries switch back to coal.

Except for the fact that coal prices followed oil and gas upwards, coal-fired power generation would have been even higher.

The emissions reduction progress the world was making through coal-to-gas switching over the last decade went into reverse.

As did our progress towards achieving universal access to clean and affordable energy.

There are now more people in the world without access to electricity, or with unreliable access, than before the pandemic.

The focus of our opponents on stopping fossil fuel projects has had no effect on consumer demand, and no effect on emissions reduction.

What it has done is to push fossil fuel developments to places such as the Middle East and Russia.

Russia and some countries in the Middle East are not committed to a peaceful, rulesbased world.

Similarly, environmental protection and climate action are not necessarily priorities.

This has created a supply crunch and has raised prices, hurting people and economies around the globe.

Almost 80 per cent of the world's primary energy still comes from oil, gas and coal – the same as 45 years ago.

And under the IEA's Net Zero scenario, the world would still be using oil and gas in 2050.

So if we're serious about decarbonisation, we have to focus on reducing emissions from their production and use.

This puts our industry at the frontline of the decarbonisation challenge.

It is a challenge that we must meet, without compromising energy security at home or in our region.

That means producing and delivering reliable, affordable and lower-carbon energy products.

It took 150 years to build the energy and economic system that has helped to progressively build all the wonders of our modern world.

Now it must be reconstructed in under three decades.

The technology that is critical for us to achieve this at scale is carbon capture, utilisation and storage, or CCUS – a proven technology.

One that Exxon has been using since 1970.

The world's biggest CCUS project is right here in Australia at the Gorgon LNG project in Western Australia – and it is working, storing six million tonnes of CO<sub>2</sub> since startup in mid-2019.

Another world-scale CCUS project is under construction at Moomba in South Australia – it will store 1.7 million tonnes of CO<sub>2</sub> per year.

CCUS can not only reduce emissions from our production - it will also enable clean hydrogen to be made from natural gas and deliver new hydrogen supply to the market, faster and more affordably than other forms of hydrogen.

Furthermore, CCUS can address Scope 3, or customer, emissions.

Wood Mackenzie predicts that, globally, CCUS will contribute 20 per cent of energyrelated emissions reduction by 2050, and hydrogen 15 per cent.

The IEA lists CCUS as one of four key pillars of decarbonisation, alongside electrification, energy efficiency and low-carbon fuels such as hydrogen, biomethane and sustainable biofuels.

The fact that there are proven examples of CCUS matters.

It matters because almost half of the emissions reductions achieved in 2050 in the IEA's Net Zero scenario come from technologies currently at the prototype or demonstration phase.

They will not be available at scale without further R&D, and technical improvements.

Bringing new energy technologies to market can take decades.

Even successful examples like solar PV, lithium-ion batteries or LED took between 10 and 30 years from the first prototype to commercialisation.

This is why CCUS is so important.

Under the Net Zero scenario, 7.6 billion tonnes of  $CO_2$  per year would need to be stored in CCUS by 2050, 200 times more than is being stored in the 30 or so commercial projects around the world today.

This is an opportunity for Australia and for our industry.

It could be our competitive advantage for the future, not only to decarbonise our own economy, but to help our customer countries decarbonise.

Just as our customers in Asia have looked to Australia for energy security over the last half century, they are now looking to us to help them reduce their emissions as they work towards net zero targets.

These countries do not have the nature-based and geological carbon sequestration resources that Australia has in abundance.

The opportunity for Australia lies in our carbon storage resources, in basins where we already produce oil and gas, and which are often close to large-scale industrial sources.

These carbon storage resources can provide the foundation for emissions reductions across the Australian economy.

This will range from enabling the production of clean hydrogen using natural gas; to storing carbon from a range of industrial and manufacturing processes; and even to permanently removing carbon from the atmosphere through technologies such as Direct Air Capture with geological storage.

The opportunity lies in the ready-made expertise of our oil and gas industry, which knows how to deploy CCUS safely.

It lies in the foresight of national, state and territory governments that have released greenhouse gas storage acreage, introduced regulatory regimes to ensure CCUS projects are safely developed, and supported CCUS hubs to underpin new resource and industrial development in a low-carbon world.

And it lies in the foresight of the Clean Energy Regulator's CCS methodology to accelerate the deployment of CCS projects by enabling them to generate carbon credits under the Emissions Reduction Fund.

The use of Australian LNG by our key trading partners is already helping reduce emissions internationally.

It is helping improve air quality in neighbouring nations and lifting the living standards of hundreds of millions of people who use dirty fuels for cooking.

Australia's LNG has the potential to lower emissions in LNG-importing countries by around 166 million tonnes of carbon dioxide each year, by replacing higher-emissions fuels.

To put this in perspective, that is equivalent to more than one-third of Australia's total annual greenhouse gas emissions.

It should be little surprise, then, that demand in our region for Australian gas is forecast to more than double by 2050.

And I predict that demand for carbon storage will be just as exciting over the next 30 years.

The benefits of our industry also occur much closer to home.

A report released in February by The Australian Gas Industry Trust found that the oil and gas industry is enabling almost half a trillion dollars, or \$500 billion, in economic activity in Australia, every year.

That's more than the building construction, food retailing, road transport, agriculture or telecommunication services sectors.

Our economic contribution supports more than 45,000 Australian businesses providing goods and services across the oil and gas supply chain.

And more than 160,000 jobs for Australian workers.

Ladies and gentlemen, this week you will hear from our energy leaders' panel on the big issues shaping the world, and our role in it.

You will hear about how our industry is the lynchpin for renewable technologies.

About how technology developed by our industry is delivering safer workplaces – like the platforms 400 kilometres offshore run by artificial intelligence.

And how we continue to work with our local communities, Traditional Owners, suppliers and contractors, and other stakeholders.

The APPEA 2022 Conference and Exhibition is our opportunity for open conversation and candid debate on how oil and natural gas continue to be *Positive Energy for a Changing World* – an overwhelming force for good.

Achieving two critical goals for people and our planet:

- One energy security, reliability and affordability;
- And, two decarbonisation, enabled by CCUS and hydrogen.

Please join your more than 2,000 fellow delegates to explore, discuss, and engage on these and other issues over the coming days.

Above all, let's celebrate the amazing contribution that our people make to this industry, to Australia and to our region.

You are really making a positive difference to people's lives.

And you are the people whose innovation and ideas will solve the historic challenges that are before us - of soaring energy demand, and the need to dramatically reduce carbon emissions, simultaneously.

Thank you – and I look forward to catching up with as many of you as possible over the next few days of our conference.

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