APPEA 2021 CONFERENCE AND EXHIBITION
CELEBRATING 60 YEARS
14–17 JUNE PERTH

APPEA 2021 Conference

Chairman's speech

Kevin Gallagher, Managing Director & CEO, Santos

Thank you Ticky.

Ladies and Gentlemen, Distinguished Guests:

I too acknowledge the Whadjuk people of the Noongar nation and pay my respects to their Elders past, present and emerging.

And I acknowledge and welcome our distinguished guests, including the Premier of Western Australia, Mark McGowan.

Not only is the Premier a great supporter of our industry, but I thank him for his support of business events like these which are a great boost to Perth's tourism and hospitality sector.

Of course, these events rely on the sponsorship and support of our member companies and this morning I want to acknowledge and thank our APPEA Conference Principal Sponsors – Clough and Woodside.

It is now two years since our last APPEA conference and the pace and nature of change for our industry over that time has been transformative.

Nothing is more certain than that this will continue for the rest of the decade.

In March 2020, the global pandemic delivered a collapse in oil and gas demand with lockdowns around the world and economies forced into hibernation.

In turn, investment in new oil and gas supply dried up, product and share prices collapsed – and concern about climate change intensified globally.

Perhaps because of a sudden awareness of universal human vulnerability in the face of the coronavirus pandemic sweeping the world.

Or a desire for permanency of the blue skies that opened up across Asia with air traffic at an all-time low and cars and trucks at a standstill – delivering views of Mt Everest from the Kathmandu Valley and northern India that had not been seen for years.

Or maybe, in the face of adversity, it was the appeal of a safer, slower, pre-modern world with home-grown food, home cooking and a simpler life.

Whatever the reason, there is no doubt the world wants a faster energy transition and many people see that as a world <u>without</u> fossil fuels.

This is despite the historical fact that the utilisation of oil and gas has probably been the single biggest boost to living standards in the history of humankind.

We ignore this at our peril.

In truth we were on this trajectory before the pandemic.

The energy and upstream sectors have underperformed the S&P500 for the last ten years.

Equity investors have turned off the taps.

US equity issuance in exploration and production fell off a cliff in 2017 and it will not recover.

Increasing ESG pressure has restricted access to capital with banks increasingly under pressure to not fund projects in our sector.

As a result, we are seeing national oil companies stepping up with more investment because demand for oil and gas is not disappearing.

There is a fundamental disconnect between what the world says it wants from the energy transformation and its consumption patterns.

In the International Energy Agency's recent Net Zero by 2050 scenario, the share of OPEC oil supply rises to over 50 per cent, the highest in history.

This will increasingly put oil supply security and prices for countries like Australia in the hands of the cartel.

Russia recently surprised the LNG industry by announcing construction of a 13 million tonnes per annum LNG plant on the Baltic coast with intended start-up as early as 2024.

That followed an announcement the week before, that start-up of the 20 million tonnes per annum Arctic LNG 2 expansion would be a year early, in 2025.

Qatar too announced this year that it will press ahead with a 32 million tonnes per annum expansion of the North Field, incorporating carbon capture and storage in the liquefaction plant.

Russia, Qatar and the OPEC producers know that the developed world will find it increasingly difficult to develop new oil and gas reserves.

And they know that demand for oil and gas is not going to decline as fast as the world might want.

In 2019, 84 per cent of the world's primary energy still came from fossil fuels – oil, gas and coal.

The share of fossil fuels in global primary energy is the same today as it was 45 years ago.

This year, the International Energy Agency looks set to report another record high for gas and coal consumption globally.

The question for us to contemplate is what the future therefore looks like for development of Australia's oil and gas resources.

Decarbonisation, through technologies like carbon capture and storage, and hydrogen production using natural gas, is critical.

Currently, hydrogen is the only obvious pathway to eliminating Scope 1, 2 and 3 emissions associated with gas production and consumption.

But there are also opportunities to staple carbon credits to LNG cargoes.

The timing of a zero-emissions energy transformation will be driven by how quickly our customers evolve.

We will need to evolve with them as they continue to demand more carbon-neutral LNG cargoes and zero-emissions fuels such as hydrogen.

APPEA and our member companies want to see the wealth of Australia's oil and gas resources unlocked for the benefit of the nation – providing secure, well-paid, skilled jobs for Australian workers, opening up new business opportunities, bringing in export income, providing revenue to help fund roads, schools and hospitals, and developing regional Australia.

<u>And</u>, providing domestic energy security.

Because – if the energy transition is not managed in an orderly fashion, it will cost manufacturing jobs, push energy prices up and increase reliance on imports.

Without decarbonisation, however, the window of opportunity for developing our oil and gas resources is rapidly closing.

All of us here today are on different stages of the decarbonisation journey, but something we can all agree on is that a net-zero future is critical for our industry.

Although it is not well recognised, it is also vital for our way of life until technology can find another path to making the vast array of products that not only sustain our living standards today, but that are also made from oil and gas.

Medical supplies and equipment including heart valves and the gloves, hand sanitisers, detergents and plastics that got us through the pandemic.

Globally, 60 per cent of clothing fibres are synthetic and are made from oil and gas.

Some components of our mobile phones and computers are made from oil and gas.

The fertilisers we use for food production – made from gas.

Milk bottles, bread wrappers, the packaging we use to transport goods around the world, our sporting equipment, toothbrushes and toothpaste – the list of things made from oil and gas is almost endless.

While renewables can replace oil and gas in electricity and transport, they cannot make the products that modern life depends upon.

Decarbonisation is a new industry opportunity for Australia – through carbon capture and storage, biological sequestration in soil and vegetation, and development of a new hydrogen industry.

Just as Japan and Korea have counted on Australia to supply the energy resources to feed their economies over the last half century, they and other countries can look to Australia to help meet their emissions reduction targets.

This is because they don't have the land we have for biological carbon sequestration or the geology for carbon capture and storage, known as CCS.

Australia has vast tracts of land on which it can store carbon from the atmosphere through soil and vegetation – a fantastic opportunity for our farmers and pastoralists.

And Australia has a natural competitive advantage in CCS with known high-quality, stable geological storage basins capable of injection at a rate of 300 million tonnes per annum for at least 100 years.

These are the same basins that have safely and permanently held oil and gas in place for tens of millions of years.

They are the same basins where many APPEA members have already demonstrated their ability to inject gases because we are already doing it to enhance oil production or to store gas so it can be brought to market quickly in periods of high demand.

This is proven technology with Australia already hosting the world's largest CCS project – the Gorgon Carbon Dioxide Injection Project at Barrow Island right here in Western Australia.

Later this year Santos will take a final investment decision on one of the world's largest CCS projects, after the Clean Energy Regulator's methodology for CCS to generate Australian Carbon Credit Units is in place.

New technologies like direct air capture – extracting carbon dioxide directly from the atmosphere – will potentially allow us to continue to utilise our vast carbon storage potential without having to capture emissions from hard-to-abate industry sectors.

Today the world stores about 40 million tonnes of carbon dioxide per year through CCS, but the International Energy Agency's 2020 report on CCS says we will need to store 5.6 billion tonnes per year by 2050 to meet our climate goals – more than a hundredfold increase on today's levels.

CCS could not only reduce Australia's emissions.

It can protect existing domestic and export industries by creating offset opportunities for industries from airlines to manufacturing, preventing the loss of tens of thousands of well-paid jobs across the country.

It could also open up a new export industry for Australia – building on our existing trade and investment in LNG with future trade and investment in carbon credits and clean fuels such as hydrogen and carbon-neutral LNG.

Australia has a further global competitive advantage through its well-established National Greenhouse and Energy Reporting Scheme, Emissions Reduction Fund and Clean Energy Regulator.

These regulatory frameworks and institutions underpin an unsurpassed reputation for carbon accounting integrity and quality of carbon credits.

The price of Australian Carbon Credit Units is now around A$19 per tonne of carbon, but the price of carbon in Europe recently hit A$90 per tonne.

The ability to sell Australian Carbon Credit Units to trading partners such as Japan and Korea could incentivise more CCS and biological sequestration projects to be developed right here in Australia.

But this would require the negotiation of bilateral agreements with prospective buyers such as Japan and Korea, and regulatory frameworks for carbon accounting across international borders, that are not yet fully in place.

Australia needs large-scale CCS projects to make development of our oil and gas resources viable for investors, financiers and customers so that the wealth of these resources can be unlocked for the nation.

Converting gas into hydrogen also offers the fastest, lowest-cost pathway to a hydrogen economy and, combined with CCS, could put Australia at the forefront of this new industry while the technology for renewable hydrogen evolves and the costs come down.

Summing up, to suggestions that Australia can become a clean energy superpower I would add this observation.

Australia can become a carbon storage superpower based on our vast tracts of pastoral and cropping land, and our depleted oil and gas reservoirs.

At this year's APPEA conference, I urge everyone to therefore consider decarbonisation not simplistically as a threat – but as an opportunity to establish a new, large-scale industry producing carbon offsets that will be in heavy demand from emitting countries that lack Australia's competitive advantages in carbon storage.

There are many other issues I could talk about today – starting with the success of APPEA and our members in collaborating with governments across the nation to keep essential gas supplies flowing and people in jobs throughout the pandemic.

Not only has the APPEA team helped steer us through the health and economic crisis facing our country, they've achieved results for every member company, in every corner of our country and I want to take this opportunity to thank them.

But there is nothing so important as facing up to the challenges confronting Australia and our industry in the global energy transformation.

At this – our 60th APPEA Conference – we've brought together the brightest minds in Australian science, the leaders of our industry, and the decision-makers of our nation to address these critical challenges and realise these great opportunities of the future.

Today, APPEA is releasing the industry's first Social Licence Report, capturing a snapshot of the work that our industry is doing to build trust across the country and give back to all Australians.

Investing in community programs and infrastructure.

Creating local opportunities for workers and businesses across our suburbs and regions.

Reducing our emissions and committing to climate action.

I encourage you to pick up a copy and learn more about what we are doing in communities right around Australia.

We support 80,000 direct and indirect jobs across the country.

Over the last decade we've invested more than A$470 billion into the Australian economy through new project construction and development and we've paid more than A$77 billion in taxes to help build roads, schools and hospitals.

We are Australia's third-biggest export industry, bringing in around A$50 billion in export income last year.

I am confident that APPEA and our members can continue to play a vital role in Australia's future through to 2050 and beyond – by embracing the opportunities created by decarbonisation to safely and sustainably develop our oil and gas resources, and <u>lead</u> the development of hydrogen and other zero-emissions energy products.

Thank you.