Case Report

1. Case Number :	**0129-24**
2. Advertiser :	**Australian Energy Producers**
3. Product :	**Energy/Resources**
4. Type of Advertisement/Media :	**TV - Free to Air**
5. Date of Decision:	**15-May-2024**
6. Decision:	**Dismissed**

ISSUES RAISED

AANA Environmental Code\1 Truthful and Factual
AANA Environmental Code\2 Genuine Environmental Benefit

DESCRIPTION OF ADVERTISEMENT

This television advertisement features footage of solar panels in sunny and gloomy weather. A voiceover explains the importance of natural gas power plants as a backup when conditions aren't ideal for renewables and the demand is high, as natural gas can be turned on or off on demand.

THE COMPLAINT

Comments which the complainant/s made regarding this advertisement included the following:

Advertisement in question claims Solar energy does not provide energy 100% of the time and that gas must be used to supplement it. This is misleading to the public, with the addition of Solar batteries and wind power, gas is redundant. This a common narrative used in misinformation campaigns about renewable energies.

The ad suggests that renewables (solar) don't work when the conditions (no sun) aren't right. This is untrue. Solar still works (albeit less) with cloudy weather. Also, solar has backnup from wind and batteries....we do not need gas as a back up. The ad us a lie.

THE ADVERTISER'S RESPONSE

Comments which the advertiser made in response to the complainant/s regarding this advertisement include the following:

1.1 INTRODUCTION

Thank you for the opportunity to provide a response to the complaints received, concerning an Australian Energy Producers' TV commercial as described in section 2.3 below (Advertisement). The complaints allege that the Advertisement breaches the Australian Association of National Advertisers Environmental Claims in Advertising Code (the AANA Environmental Code). Ad Standards has identified Section 1(a) of the AANA Environmental Code, which requires that Environmental Claims must not be misleading or deceptive or be likely to mislead or deceive, and Section 2(b) of the AANA Environmental Code, which requires that Environmental Claims must not overstate the claim expressly or by implication, as the issues raised by the complaints. The notification also requests substantiation of any Environmental Claims made in the Advertisement.

Australian Energy Producers takes compliance with the AANA Environmental Code very seriously, and firmly believes that the Advertisement fully complies with that code, as well as the AANA Code of Ethics and all other relevant codes and laws. The following response addresses the potential concerns and issues raised in the notification of complaint.

1.2 SUMMARY OF COMPLAINTS

The complaints refer to the Advertisement as "misleading" "misinformation" "untrue" and "a lie" given the Advertisement's description of how gas-generated electricity supports electricity generated through renewables like solar and wind. As such, we understand that Ad Standards has directed us to address the following:

- *whether the Advertisement is contrary to Section 1(a) of the AANA Environmental Code by being misleading or deceptive in its description of how natural gas can be used to back up renewable energy, and/or*
- *whether the Advertisement is contrary to Section 2(b) of the AANA Environmental Code by overstating the role of natural gas in the energy mix.*

2. OUTLINE OF RESPONSE

In summary, Australian Energy Producers considers that the Advertisement fully complies with the AANA Environmental Code, including because:

- *the representations in the Advertisement are accurate, proportionate and supported by detailed evidence; and*
- *the Advertisement does not expressly or impliedly overstate an environmental benefit of natural gas; and*
- *the Advertisement does not make any express or implied representation about how natural gas interacts with or influences the environment. Rather, it describes the important role that natural gas has to play in Australia's energy mix and in supporting renewable electricity generation.*

2.1 BACKGROUND TO AUSTRALIAN ENERGY PRODUCERS AND THE AUSTRALIAN GAS SECTOR

Australian Energy Producers is an industry body of energy producers, including gas explorers and producers active in Australia and companies providing goods and services to those explorers and producers.

The gas sector continues to play a fundamental role in our nation's economy, providing essential energy for businesses and homes in Australia and in our region. This ongoing and important role for gas in the energy mix and the energy transition has been recognised by the Australian Government's recently released Future Gas Strategy (Department of Industry, Science and Resources (DISR), Future Gas Strategy, 2024) that "maps the Australian Government's plan for how gas will support our economy's transition to net zero".

The Future Gas Strategy highlights the following:

> *"Gas power generation will underpin Australia's electricity supply in the transition to a net zero economy. It is likely that gas will still play a role in electricity generation up to and beyond 2050" (DISR, Future Gas Strategy, 2024 at p.38)*
>
> *"Gas-powered generators are versatile. They can scale up and down rapidly, and so can supply power during peak electricity demand (called 'peaking') and complement variable wind and solar generation (called 'firming')." (DISR, Future Gas Strategy, 2024 at p.10)*
>
> *"Without gas power generation, the electricity grid would be unable to cope with peak electricity demand." (DISR, Future Gas Strategy, 2024 at p.15)*

The Prime Minister, following the release of his government's Future Gas Strategy, emphasised this important and ongoing role, stating that "gas plays an important role in that transition to Net Zero…we know that gas has a role to play in that transition because of the firming capacity it provides."

Similarly, in a speech delivered on 1 May 2024, the Hon Chris Bowen MP, Minister for Climate Change and Energy said the following:

> *"First, gas will play an important role in electricity by firming and peaking renewables. Unlike coal and nuclear, gas generation is flexible. The ability to turn gas peaking power stations on and off at very short notice is sensible support for renewables. Second, while technologies like green hydrogen will be vital – and I am very optimistic about Australia's role in the global hydrogen supply chain – there are not yet substitutes for gas in many industrial settings. And third, with current supplies of gas dwindling, new supply will be needed – even as we electrify at pace."*

2.3 DESCRIPTION OF THE ADVERTISEMENT

Both case 0129-24 and 0130-24 reference the same Advertisement. This Advertisement has been broadcast since 11 March 2024 and is ongoing. It has been broadcast or made available to view in the following ways:

- *free to air TV, via Paramount 10 and the 7 Network;*
- *pay TV on Fox Footy;*
- *broadcast video on demand;*
- *Online, via YouTube, NewsCorp website and through social media channels including Meta.*

The Advertisement in question received Clear Ads approval, reference number GBGC8PLF.

In summary, the Advertisement contains visual representations of a solar energy farm in the sunshine and then in the rain. This is followed by scenes of a natural gas flame and the command centre of a gas plant, a store open sign turning on, household lights and appliances (dishwasher, washing machine, air conditioner), and finally a family watching television. The Advertisement features a voice over delivering the following script:

> *"Renewable electricity when the conditions are right. Backed up by gas-powered electricity when they're not. Australian Natural Gas power plants are an important back up when conditions aren't ideal for renewables and demand is high. Because natural gas can be turned on or off on demand. That's how Australian Natural Gas helps keep the country running."*

The Advertisement depicts many of the household and retail uses of electricity that Australians use on a day-to-day basis, as well as referencing renewable electricity and gas power generation as two commonly used and complementary forms of electricity generation currently used in Australia.

The Advertisement makes the following claims, which are fully substantiated: Natural gas is a flexible energy source, backing up renewable energy for electricity generation in Australia. Gas generation can ramp up quickly in response to changes in demand or supply. Renewable energy may not be available to meet demand in some circumstances.

The Advertisement also provides additional information by referring to the Keeping the Country Running campaign website (https://keepingthecountryrunning.com.au/about/), which provides further information on the role of natural gas in Australia's energy mix.

3. RESPONSE TO THE COMPLAINT

As summarised in our outline in section 2 above, Australian Energy Producers considers that the Advertisement fully complies with the AANA Environmental code.

3.1 THE ADVERTISEMENT IS ACCURATE AND SUPPORTED BY EVIDENCE

The description of the current limitations in renewable energy for electricity generation and the role of natural gas to support renewables in the Advertisement is factually accurate and supported by robust independent international and Australian evidence.

Renewable energy is an important part of Australia's electricity mix, in particular wind and solar. However, renewable energy generation has specific characteristics and well recognised limitations that need to be considered, even when taking into account the potential for storage of renewable energy.

Variable renewables – wind and solar – by their nature vary based on prevailing weather conditions. Across the National Electricity Market (NEM), wind and solar on average produce 25-35 per cent of the electricity they would if they were running at their full capacity 100 per cent of the time. (Australian Energy Market Operator (AEMO), Quarterly Energy Dynamics Q4 2023, 2023). This is known as their 'capacity factor'. This means they are not producing at full capacity, or at all, for potentially extended periods of time. The same is the case in the west coast electricity market.

Given wind and solar are relying on different energy sources, there will be times when the weather conditions will be favourable to one source but not the other. To an extent, wind and solar used in combination across a wide geographical area may combine to produce electricity for a greater proportion of the time than each would individually. However, there will still be times when wind solar are both producing significantly less than their usual volumes. These periods regularly extend into what are known as 'renewable droughts' (AEMO, Draft 2024 ISP, 2023). At these times wind and solar will need to be complemented by other electricity sources. This is especially the case when times of low renewable generation coincide with times of high electricity demand.

According to AEMO, "Renewable droughts are common, local events that typically last a few hours or a day or two and are more likely in winter when there is less solar irradiation (energy) and shorter daylight hours" (AEMO, Draft 2024 ISP, 2023). Further, while "Historical weather patterns suggest that longer 'dark and still' periods of up to 3 days covering a wide geographical area are rare", that "future weather may not replicate the past, especially with climate change, so there may be longer and more widespread renewable droughts" (AEMO, Draft 2024 ISP, 2023).

Batteries and other forms of electricity storage can assist during periods of high demand or when conditions are not favourable to solar or wind energy generation, but also have well recognised limitations. While batteries can store renewable energy, they provide limited support for extended periods of low renewable generation and renewable droughts, as they only store electricity between 4 hours (shallow storage) and 12 hours (medium storage). Deep storage, such as pumped hydro, is able to "cover long periods of low sunlight and wind (renewable droughts), backed up by gas-powered generation" (AEMO, Draft 2024 ISP, 2023). This highlights that even pumped

hydro cannot address renewable droughts without being backed up by gas. In part this is because even long-duration deep storage can still be exhausted:

> *"Gas is and will continue to be a key generation source in Australian energy markets, particularly as a peaking fuel when there is low renewables generation and storage options have been exhausted." (DISR, Future Gas Strategy Analytical Report, 2024, p.83)*

> *"Gas-powered generation will provide necessary back up with critical power supply when it is needed, both for 'renewable droughts' of 'dark and still' conditions, or to meet peaks in consumer demand." (AEMO, Draft 2024 ISP, 2023, p.24)*

As part of the AEMO Draft 2024 Integrated Systems Plan (ISP) (AEMO, Draft 2024 ISP, 2023), AEMO consider the generation mix needed to meet demand during an 8-day renewable drought in 2040, as part of the Step Change Scenario. In 2040, the Step Change Scenario sees 150 GW of wind and solar capacity deployed – around four times current levels, and 44 GW of dispatchable energy storage – 20 per cent of total NEM capacity in 2040 and over 12 times current dispatchable energy storage. During the period of renewable drought modelled, wind and solar together produce less than 18 per cent of total NEM demand. During this period, despite the significant electricity storage capacity in the system, there are times when gas power generation is required to supply over 40 per cent of total NEM demand (AEMO, Draft 2024 ISP, 2023).

Further information on electricity storage is provided in Section 4 below.

Gas plays an important role as a flexible energy source, backing up renewable energy for electricity generation in Australia

> *"Renewable energy connected by transmission, firmed with storage and backed up by gas is the lowest cost way to supply electricity to homes and businesses through Australia's energy transition" providing "secure, reliable and affordable power" (AEMO, Draft 2024 ISP, 2023).*

Gas has a key role to play in maintaining the reliability of power supply to households and businesses by providing 'dispatchable capacity' that can "be turned on or off, without being dependent on the weather" noting that "Dispatchable capacity is required to provide firming during periods of low variable renewable energy output in the NEM." (AEMO, Draft 2024 ISP, 2023).

Gas power generation is particularly important against a backdrop of the phase out of coal from the NEM over time, as well as the limited opportunity to expand hydro power capacity beyond the locations that are currently operational. To demonstrated this, in the AEMO Step Change Scenario, there is no black or brown coal left in the grid in 2040 and hydro power sees a decrease in available capacity by around 10 per cent relative to today's levels.

The Australian Government's recently released Future Gas Strategy clearly highlights

the importance of gas power generation as part of Australia's net zero pathway:

> *"Gas power generation will play a crucial role in assisting the transformation of our electricity markets" (DISR, Future Gas Strategy, 2024, p.19).*
>
> *"Gas power generation will underpin Australia's electricity supply in the transition to a net zero economy. It is likely that gas will still play a role in electricity generation up to and beyond 2050." (DISR, Future Gas Strategy, 2024, p.38).*
>
> *"From 2035 to 2050, annual demand for gas power generation is forecast to increase, with the need for large, time-limited contributions from GPG expected to continue." (DISR, Future Gas Strategy, 2024, p.19).*
>
> *Further, the Future Gas Strategy emphasises the role of gas power generation in backing up wind and solar and supplying power during times of peak electricity demand:*
>
> *"Gas-powered generators are versatile. They can scale up and down rapidly, and so can supply power during peak electricity demand (called 'peaking') and complement variable wind and solar generation (called 'firming')." (DISR, Future Gas Strategy, 2024, p10).*
>
> *"Gas power generation is important for grid security and reliability as it can start up quickly. This means it can complement variable wind and solar generation and provide extra power supply during periods of peak electricity demand." (DISR, Future Gas Strategy, 2024, p.10).*

This is the case both at a national level and at a state level:

> *"South Australia, which has some of the highest uptake of renewable power generation in the world, uses solar and wind during the day. At night, gas-powered generation helps fill the gap." (DISR, Future Gas Strategy, 2024, p.8).*

Gas generation can ramp up quickly in response to changes in demand or supply

As noted in the quotes above, a characteristic of gas power generation is that it is able to ramp up or down quickly in response to changes in demand or supply. The AEMO Integrated System Plan (ISP), 2023-24 uses inputs, assumptions and scenarios that indicate that the maximum ramp rates (maximum change in output) for gas fired generation peaking plants (Open Cycle Gas Turbine) is 22 Megawatts (MW)/minute (min). This compares to 3-8 MW/min for black coal generation, 3-10 MW/min for brown coal, 1-6 MW/min for CCGT, 5-5.6 MW/min for gas powered steam turbines and 22MW/min for hydrogen-based gas turbines. (AEMO, 2024 Integrated System Plan (ISP) inputs assumptions and scenarios, 2023)

The Prime Minister and key Ministers have acknowledged the important role of natural gas in supporting renewables

Prime Minister Anthony Albanese:

> *"And for that pathway to get there to Net Zero, including eighty-two per cent renewables by 2030, what you need is the firming capacity of gas will play a role in that. We know that that's the case. You can't get to Net Zero through wishful thinking. You need to get to Net Zero by making sure that you have that pathway there. (Prime Minister Anthony Albanese, Transcript of Prime Minister's press conference, 10 May 2024)*
>
> *"The work of transition will require massive investment in building new physical assets and modifying existing ones. This is where gas in particular has a key role to play, as a flexible source of energy – providing peaking power today and continuing to provide firming power. Helping to smooth the transition to renewables, while guaranteeing energy security both for Australia and for our partners in the region." (Prime Minister Anthony Albanese, Transcript of Prime Minister's speech to the AFR Business Summit, 7 March 2023)*

The Hon. Madeleine King, Minister for Resources, and Northern Australia:

> *"…you've got to have the gas to firm up the renewables to 2030 and beyond." (The Hon. Madeleine King, Minister for Resources, and Northern Australia, Transcript of radio interview, 9 May 2024)*
>
> *"Gas is essential to supporting the nation's energy grid and the reliable supply of gas is crucial to keeping energy prices down for households and businesses."; "Gas is our insurance policy for the energy grid as we move to cleaner and greener renewables" (The Hon. Madeleine King, Minister for Resources, and Northern Australia, Media Release Gas market code secures supply for domestic market, 22 January 2024)*

The Hon. Chris Bowen, Minister for Climate Change and Energy:

> *"It supports renewable energy because you can turn it on and off quickly, unlike coal and unlike nuclear, it is flexible and can respond to needs, and that's a pretty important scaffolding around this massive transition to renewable energy which we are engineering and which we are embracing and pushing." (The Hon. Chris Bowen, Minister for Climate Change and Energy, Transcript of radio interview, 10 May 2024)*
>
> *"We know that gas is critical to supporting a lower-cost, more renewable grid as aging coal exits, and to support Australian manufacturing – which is why we've delivered this code to shore up energy reliability and affordability after a decade of chaos. (The Hon. Chris Bowen, Minister for Climate Change and Energy, Media Release Gas market code secures supply for domestic market, 22 January 2024)*
>
> *"Domestically, the government has a target of 82 per cent renewable energy in our energy mix by 2030", "And as aging coal-fired power stations leave the*

grid, that 18 per cent will increasingly be focused on gas. Gas is a flexible fuel necessary for peaking and firming as we undertake this transformation." (The Hon. Chris Bowen, Minister for Climate Change and Energy, Transcript of Minister's speech to CEDA WA Energy Transition Summit, 17 November 2023)

The role for gas in backing up renewables and supporting reliable electricity supply is recognised by global energy authorities, including the International Energy Agency (IEA):

> *"Gas can also contribute to security of supply by balancing variable renewables and meeting peaks in demand." (IEA, The Role of Gas in Today's Energy Transitions, 2019)*
>
> *"Why is natural gas important? Natural gas accounts for about a quarter of global electricity generation. It is easily stored and can be delivered through pipelines or liquefied and sent by ship. Gas-fired power plants can turn on and off quickly. Gas is thus a convenient way to respond to both seasonal and short-term demand fluctuations". (IEA, Natural Gas, Website (accessed 16 February 2024)).*

4. OTHER MATTERS RAISED BY THE COMPLAINT

Battery capacity

Complaint 0129-24-1 refers to the role of batteries to back up renewables to improve reliability. The Advertisement does not make any express or implied representation about batteries.

While batteries will almost certainly have a significant role in the future, given that today they can only provide back up for limited periods, the Advertisement is not inaccurate or misleading. This is supported by robust independent international and Australian evidence, which we have provided below.

Batteries and pumped hydro power allow renewable energy to be stored for use when these variable sources are not generating, however, dispatchable energy storage capacity is very limited today and will need to be complemented by gas power generation.

Batteries and pumped hydro power are two methods that enable electricity – including renewable-based electricity – to be stored at one point in time for use at another point in time. These dispatchable energy storage options are commonly cited as key technologies for firming variable renewable power – such as solar or wind which only generate electricity in certain conditions – allowing renewable energy to be used even when it is not being generated.

While these technologies are seen to have a significant role in the future, currently they have limited deployment and therefore can only store a very small amount of renewable power (as explained further below). Further these technologies, in general, only have limited capacity meaning they can only store energy for limited amounts of

time (also addressed further below). Therefore, even with very high penetrations of dispatchable energy storage other dispatchable generation, such as gas power generation, will continue to be required.

The role of gas power generation in the context of current and future dispatchable energy storage can be seen in the NEM where AEMO suggest that:

> *"Renewable energy connected by transmission, firmed with storage and backed up by gas is the lowest cost way to supply electricity to homes and businesses through Australia's energy transition" providing "secure, reliable and affordable power" (AEMO, Draft 2024 ISP, 2023).*

AEMO estimate that the NEM currently has approximately 3.4 GW of energy storage capacity that together is expected to deliver approximately 17.1 GWh of power to the grid in 2023/24 (AEMO, 2022 ISP, 2022). Current demand in the NEM is approximately 180,000 GWh (AEMO, 2022 ISP, 2022), meaning electricity storage currently can meet approximately 0.01 per cent of total NEM annual electricity demand – or around 50 minutes of total annual electricity demand. Averaged over the year, this means that in periods where the weather conditions are not amenable to the generation of electricity from solar and wind, dispatchable energy storage could meet approximately one minute of total NEM demand each week.

Of the current dispatchable electricity storage capacity in the NEM, approximately 45 per cent comes from distributed, consumer owned batteries, 31 per cent from shallow storage technologies of up to 4 hours, 19 per cent from medium storage of up to 12 hours, with the remainder coming from deeper storage technologies, predominantly pumped hydro (AEMO, 2022 ISP, 2022). Therefore, while dispatchable energy storage can currently meet 50 minutes of total annual NEM electricity demand, in practice these energy storage technologies will be meeting a much smaller fraction of demand for longer durations - generally up to 4 to 12 hours at a time. Put another way, current total power generation in the NEM from dispatchable energy storage could meet one per cent of NEM demand for 100 minutes per week, or a little over 14 minutes per day.

In this example, the remaining 99 per cent of the NEM would need other dispatchable power sources, such as coal, hydro, and gas – or in practice a combination of a range of power sources – to increase generation to meet ongoing demand. Similarly, the 1 per cent of the NEM serviced by dispatchable energy storage would also need these other sources of power to meet demand once the storage energy has been fully discharged. Of these other sources of dispatchable power, gas power generation plays a particularly important role as it can be turned up and down quickly, and isn't susceptible to weather and climate fluctuations in the same way that hydro power can be. This is why AEMO see gas power playing a particularly important ongoing role in backing up renewables and complementing energy storage, as outlined above (AEMO, Draft 2024 ISP, 2023).

5. CONCLUSION

AANA Environmental Code

Australian Energy Producers firmly believes that the Advertisement fully complies with all sections of the AANA Environmental Code.

In particular, Ad Standards has identified Sections 1(a) and 2(b) of the AANA Environmental Code as the issue raised by the complaint. We do not consider that the Advertisement, either expressly or by implication, is misleading or deceptive or overstates a benefit to the environment, for the reasons set out above.

Further, and for completeness, Australian Energy Producers also considers that the Advertisement complies with the AANA Code of Ethics (including section 2).

We respectfully submit that the complaint should be dismissed.

THE DECISION

The Ad Standards Community Panel (the Panel) considered whether this advertisement breaches the AANA Environmental Claims in Advertising and Marketing Code (the Environmental Code).

The Panel noted the complainants' concern that the advertisement is misleading.

The Panel viewed the advertisement and noted the advertiser's response.

Is an Environmental Claim being made?

The Panel noted that the Environment Code applies to 'Environmental Claims' in advertising and marketing communications.

The Panel noted that the Code defines Environmental Claims as "any express or implied representation that an aspect of a product or service as a whole, or a component or packaging of, or a quality relating to, a product or service, interacts with or influences (or has the capacity to interact with or influence) the Environment".

The Panel noted the advertisement includes the statement "Australian Natural Gas powerplants are an important backup when conditions aren't ideal for renewables". The Panel considered that this was an environmental claim.

1 a) Environmental Claims in Advertising or Marketing Communication…shall not be misleading or deceptive or be likely to mislead or deceive

The Panel noted that the Practice Note for this Section includes:

> *"It is not intended that legal tests be applied to determine whether advertisements are misleading or deceptive, or likely to mislead or deceive, in*

the areas of concern to this Code. Instead, consideration will be given as to whether the average consumer in the target market would be likely to be misled or deceived by the material.

Factors to consider include:

- *An advertisement may be misleading or deceptive directly or by implication or through emphasis, comparisons, contrasts or omissions. It does not matter whether the advertisement actually misled anyone, or whether the advertiser intended to mislead – if the advertisement is likely to mislead or deceive there will be a breach of the Code.*
- *The target market or likely audience of the advertising or marketing communication should be carefully considered when making environmental claims. Therefore all advertising should be clear, unambiguous and balanced, and the use of technical or scientific jargon carefully considered."*
- *Environmental claims relating to future matters or commitments should be based on reasonable grounds as at the time the claim was made, even if the future matter does not come to pass. The fact that a person may believe in a particular state of affairs does not necessarily mean that there are reasonable grounds for the belief."*

The Panel noted the advertiser's response included substantiation showing that there are certain conditions which aren't ideal for renewable energy, and backups such as batteries are not currently able to meet the demand when conditions are not ideal.

The Panel considered that the claim in the advertisement that Australian Natural Gas powerplants are an important backup when conditions aren't ideal for renewables is an accurate statement which is supported by information provided by the advertiser.

The Panel considered that the claim does not give the impression that gas is renewable or good for the environment, or that renewables are unreliable or should not be used.

Overall, the Panel considered that the environmental claim in the advertisement is not misleading or deceptive, or likely to mislead or deceive.

Section 1 a) conclusion

The Panel determined that the advertisement did not breach Section 1 a) of the Environmental Code.

Conclusion

Finding that the advertisement did not breach the Environmental Code on any other grounds the Panel dismissed the complaint.