



## **Submission to the Future Gas Strategy consultation paper**

BlueScope welcomes the opportunity to comment on the Future Gas Strategy consultation paper.

BlueScope is **Australia's largest steel manufacturer** and the only flat steel producer. We **employ around 7,000 Australians** at more than 100 sites across the country, supplying customers in the building and construction, manufacturing, transport, and agriculture sectors. BlueScope also exports steel products and is a global leader in premium coated and painted steel products, manufacturing in 16 countries. Globally, **BlueScope employs around 16,500 people in New Zealand, the Pacific Islands, Asia and the USA.**

As a **significant user of gas** at its various manufacturing facilities in NSW and Victoria, **BlueScope has a direct interest in the future of Australia's gas market.**

Our current Australian domestic consumption of network gas is **around 4PJ**. In addition, BlueScope also uses **28PJ of indigenous gas** produced as a by-product of the steel blast furnace and coke ovens at the Port Kembla facility. Gas is also used at midstream sites in New South Wales and Victoria such as paint lines and coating lines where it is used to fire furnaces and ovens and support high heat processes above 800 degrees Celsius. Technology to electrify these processes is nascent and not currently viable. Biomethane could potentially fill this demand if sufficient volumes were commercially available. However, BlueScope will **continue to be a significant gas user into the future** and has signed a supply agreement with Senex for the supply of 2PJ per annum from 2026<sup>1</sup>.

**Decarbonising BlueScope's operations meaningfully and achieving its net zero by 2050 goal depends on using gas** until hydrogen is cost competitive. This builds on BlueScope's interim targets of a **12% reduction in emission intensity in steelmaking and 30% in non-steelmaking by 2030.**

Using **Direct Reduced Iron (DRI) technology**, BlueScope's anticipated transition pathway to low emissions steel is to use gas in the DRI process until hydrogen is cost competitive. Initially this would **reduce BlueScope's steel making emissions by more than 60%** from current levels. When **hydrogen** is available, **emissions would be reduced by approximately 85%**, meaning that the heavy lifting on emissions reductions will be driven by access to cost effective gas.

This long-term strategy would **allow Australia to maintain sovereign iron and steelmaking capability.**

But to achieve this, **BlueScope will need to access up to 40PJ of gas per annum** at commercially competitive prices – or about 7 per cent of current gas demand in eastern Australia. The step change in gas sourcing is driven by the loss of indigenous gas production from the cessation of blast furnace and coke ovens production and the transition to DRI technology.

While the Australian Energy Market Operator is forecasting a decline in gas demand over the next 20 years, most of this is through demand destruction. In contrast, **BlueScope's current and future need for gas underlines the resource's importance to assist Australia in decarbonising.**

Additionally, **BlueScope will require 3.6TWh per annum of firm, cost competitive renewable electricity** – the equivalent of a **quarter of the state of South Australia's annual electricity demand.**

In response to the consultation paper, BlueScope would like to particularly emphasise the following:

1. **Gas is critical as Australia seeks to decarbonise.** The availability of affordable gas is central to BlueScope's long term decarbonisation strategy, until such time as green hydrogen becomes commercially viable. In this way, gas is a key enabler of the 'bridge' to net zero. Without it, BlueScope's plans to deliver major reductions in greenhouse emissions while retaining and enhancing Australia's sovereign steel production will be undermined. In this context it is notable

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<sup>1</sup> Subject to Senex securing exemption from Federal Government gas price cap.

that several overseas jurisdictions with ambitious climate change targets see a key role for gas to provide energy security and support decarbonisation. For example, in the EU a 27-year LNG supply contract with Qatar has been entered into by Shell, to supply the Netherlands.

2. **Demand for gas as a 'transitional fuel' is understated.** Demand for gas from several industries is likely to increase in the medium-term to help them meet climate change goals, before tailing off in the longer term. This includes industries such as iron and steelmaking that will be seeking to move away from coal as a key input, but for whom green hydrogen is not likely to be viable until well into the 2030s or 2040s. The potential role for low-emissions gaseous fuels (e.g. biomethane) is also important in this transition.
3. **Assumptions of a linear fall in gas demand are not likely to be correct.** Rather, demand is likely to vary considerably by industry and occur in a series of step-changes as large, 'lumpy' capital investments occur when alternative technologies and inputs become viable.
4. **Future pricing expectations are not globally competitive.** The consultation paper assumes that prices of ~\$12/GJ remain globally relevant and appropriate. However, such prices will not support the critical role of natural gas in helping to decarbonise iron and steelmaking in Australia. Other gas rich nations, such as in the Middle East and United States, are already attracting investment in direct reduced ironmaking based on their materially lower gas prices. In Europe, substantial government subsidies, and protections, such as the recently commenced carbon border adjustment mechanism, are attracting investment in low emissions ironmaking. If low emissions ironmaking becomes concentrated in these regions, the risk is that such investment will be lost to Australia without affordable gas supplies and supportive policies. Once lost, such investment is very unlikely to return.
5. **New gas developments are required in Australia.** Bass Strait gas production is declining, and the need for replacement gas is paramount. Victoria and New South Wales need to expedite gas developments by removing legislative bans (Victoria) and providing expedited approval processes (New South Wales).

The **A\$12/GJ price anchor operates as a floor-price** for gas in the eastern Australian gas market. This is **well above internationally competitive prices other steel producers face**. Alternatives like LNG will be even more expensive [imports not likely to be competitive]. Together these highlight the **need for more gas being made available to domestic Australian gas users**.

**Harmonisation of Federal and State environmental approvals** is required to expedite new gas developments.

6. **A proportion of new gas supply should be reserved for domestic use ahead of export.** To lower prices for domestic customers, a proportion of new gas developments should be reserved for domestic use. Domestic reservation has been successful in supporting investment in processing and manufacturing in Western Australia (WA Domgas policy), and more recently in Queensland (Qld tenement reservation). Governments should also consider cost-effective alternatives to building new transmission infrastructure, such as developing more liquid and transparent trading hubs and facilitating gas swaps.
7. **Electrification offers an opportunity to reduce some industrial gas usage and free up gas suppliers for other users.** Currently, **LNG producers** in addition to being major exporters are the **largest gas users in Australia, consuming approximately 100PJ per annum in their own operations**. The use of gas in LNG processing could be reduced through **greater use of renewable energy in the liquefaction process**. This would **free up existing gas for decarbonisation projects** like that proposed by BlueScope, and in industries where electrification of high temperature manufacturing processes is not feasible. A coordinated approach to LNG industry electrification therefore offers an opportunity to efficiently unlock the gas needed for industrial decarbonisation without increasing the overall carbon budget. This will help achieve Paris Agreement targets.

8. **Gas demand for peaking will grow.** While aggregate gas consumption for electricity generation is likely to decrease over time, it is important to acknowledge that gas demand for peaking plants to help firm renewable electricity will grow as the penetration of renewables in the electricity system grows. Firming will be critical to underpin the affordable, reliable electricity supply that BlueScope will need for 24/7 manufacturing processes such as iron and steelmaking.

BlueScope has been working with industry associations, most notably Manufacturing Australia, and partners for more than a decade to seek policies that delivered **competitively priced natural gas** for **domestic value-adding manufacturing uses**. This work began when it became clear that the establishment of the East Coast export LNG industry was fundamentally changing the dynamics of the domestic gas market, away from the **interests of domestic consumers** and towards those of gas exporters. Unfortunately, despite our efforts, policies under several governments have **failed to deliver** adequate supplies of gas at **affordable prices** for domestic users and have left entrenched **serious flaws** in the domestic gas market. The Federal Government's Future of Gas Strategy is an opportunity to address these issues and **rebalance the domestic gas market** so that it helps deliver sufficient gas at **internationally competitive prices** to help underpin the **decarbonisation** of important **sovereign** manufacturing industries.

Appendix 1 provides responses to specific questions raised in the consultation paper.

If you require clarification about any of the matters outlined in this submission, we would be happy to discuss them further with you.

Yours sincerely



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## About BlueScope

BlueScope manufactures iron and steel products in Australia using the blast furnace – basic oxygen furnace (BF-BOF) process at the Port Kembla Steelworks (PKSW) in NSW. This process takes raw materials including iron ore, metallurgical coal and limestone and smelts them to produce raw iron. Further processing then takes place to add scrap and other elements to make steel. Approximately three million tonnes of steel products are manufactured at PKSW each year, with up to about one-third exported.

This iron and steelmaking process is carbon intensive. In fact, carbon is integral to the chemical reaction to extract iron from iron ore and steel is an alloy of iron and carbon. To significantly reduce greenhouse gas (GHG) emissions, a new process that manufactures iron without using coal will need to be commercialised. BlueScope and its industry partners consider the most prospective process for low-emissions ironmaking to be direct reduced iron (DRI). Production of DRI is a solid-state process in which natural gas or hydrogen is used to remove oxygen from iron ore. Even after the DRI process is adopted, a residual source of carbon would still be required for its alloying properties, to make steel.

BlueScope has two interim GHG reduction targets by 2030: a 12 per cent reduction in emissions intensity from its iron and steelmaking sites; and a 30 per cent reduction in emissions intensity from non-steelmaking sites. It also has a goal of net zero GHG emissions by 2050.

## Efficiency and renewable gases

BlueScope is taking steps to use natural gas more efficiently. These steps include replacing older generation oven technology at its Western Port plant in Victoria, which will reduce natural gas consumption at the site by approximately 330TJ per annum, thereby reducing GHG emissions by approximately 18,000 tonnes (CO<sub>2</sub>-e) per annum.

BlueScope is a signatory to the Renewable Gas Challenge, which aims to support the development of renewable gases such as biomethane by, among other things, biomethane certification so that hard-to-abate sectors of the economy have line of sight into cost-competitive and meaningful emissions reduction opportunities.

BlueScope is also engaged in several commercial discussions on the development of biomethane projects across the East Coast gas market. Although conversations are in early stages and it will be some time before biomethane projects are cost competitive with natural gas, the Company sees a real need for industry leadership in this sector and will continue to support commercial-scale projects coming to the market.

## Low emissions iron and steelmaking study

BlueScope is currently undertaking a scoping study to examine options for low-emissions iron and steelmaking in Australia. It has two main objectives:

1. Identify iron and steelmaking options that provide a step change in carbon emissions reduction and set the pathway to net zero by 2050.
2. Identify and quantify the enablers required for each option and any additional government measures required to support this on an economic basis.

The study, which is expected to be completed in 2024, is examining several potential locations for low-emissions ironmaking using a DRI process, at Port Kembla and in South Australia and Western Australia. This includes examining options to manufacture DRI using both hematite and magnetite ores. The study assumes that steelmaking will remain in Port Kembla, with its well-established infrastructure, workforce, and proximity to key markets.

Although the study has not been completed, its preliminary findings are that, under all options examined, meeting climate change targets will require use of natural gas to manufacture DRI, until green hydrogen becomes viable in the late 2030s or 2040s. DRI processes can be configured to use natural gas and transitioned (at relatively low cost) to hydrogen once it is price competitive. It could require up to 40PJ

of natural gas per annum, which is equivalent to about 7 per cent of current gas demand in Eastern Australia. Use of natural gas to manufacture DRI would cut emissions by approximately 60 per cent compared to the current BF-BOF process at PKSW using coal. This would reduce BlueScope's Scope 1 GHG emissions by approximately 3.7 million tonnes per annum.

As well as being important to achieving Australia's emissions targets, investing in low-emissions technology will help maintain sovereign iron and steelmaking in Australia. Steel products are essential inputs for a wide range of domestic industries, including building & construction, manufacturing, renewable energy, and defence. In this way, the production of low-emissions steel will form a critical component in the nation's broader clean energy transition. It will also help build local capabilities and expertise in decarbonisation, and the development of critical intellectual property in Australia for the processing of iron ores.

## Appendix 1 – Responses to Consultation Paper questions

Question	BlueScope Response
<p>1. Do you use any international and/or domestic forecasts to inform your outlook of the gas market? We want your views on which scenarios best reflect the demand outlook. Are there any limitations or additional factors impacting the demand outlook you would like to note?</p>	<p>BlueScope references the AEMO GSOO and several other subscribed publications from specialist consultants including Wood Mackenzie and EnergyQuest to better understand international and domestic markets.</p> <p>At a domestic level, the demand outlook is uncertain beyond two or three years out.</p> <p>Large users will base their forecasts on overall production plans and so industrial gas use is a reflection not only of the pace of gas alternatives but of their underlying view of their own industries.</p> <p>Additionally, large users will not include confidential or sensitive information in this publication. Over reliance on GSOO or demand forecasts may not be the most reliable predictor of future demand.</p> <p>We urge caution when using gas demand projections based on 1.5-degree warming scenarios. These projections are based on what is needed to limit global temperature rises and may be overly optimistic regarding the roll out of renewable power, electricity transmission infrastructure, electrification of industry, green hydrogen production, and carbon capture and storage or direct air carbon capture. If this is the case, gas demand projections are likely to be significantly underestimated in these scenarios and lead to narrow views such as the IEA concluding in its <i>Net Zero Roadmap: A Global Pathway to Keep the 1.5°C Goal in Reach (2023)</i><sup>2</sup> that there is no need for investment in new natural gas. Also, gas should not be aggregated with coal and other fossil fuels in such forecasts, given its potential role in assisting industries such as iron and steel to achieve significant GHG abatement.</p>
<p>2. What role do you see gas-fired generators playing in supporting Australia's 82% renewable energy targets and beyond?</p>	<p>Gas fired generators will be an essential part of the energy transition. Gas provides deep firming to support a more resilient grid when renewables are not available and long duration storage options such as pumped hydro or batteries have been exhausted or are not available.</p> <p>BlueScope requires 24/7 power supply and gas firming will feature in its energy mix going forward.</p>

<sup>2</sup> <https://www.iea.org/reports/net-zero-roadmap-a-global-pathway-to-keep-the-15-0c-goal-in-reach>

<p>3. <i>How will the expected trends in demand from gas-fired generators impact other gas users?</i></p>	<p>The Princeton Net Zero study considers new gas-fired generation required in all modelled scenarios to firm up renewables beyond other options such as pumped hydro and batteries. Gas will invariably become peakier as renewables penetration increases and is likely to result in seasonably variable demand. Variable and seasonal demand disrupts traditional gas supply commercials and favours intermittent supply options such as LNG import terminals. This will impact other gas users because gas will cost more as the marginal molecule of peaky gas supply sets the underlying cost base for flat, stable gas users. The problem is particularly acute when investment signals are dampened through State and Federal policies.</p>
<p>4. <i>What should government do to consider managing these impacts and to mitigate energy peaks caused by regional or seasonal variations?</i></p>	<p>Implement a national domestic market obligation where gas export projects must supply a proportion of gas production to Australia's manufacturing sector, especially where gas contributes to a manufacturing facility's emission abatement. Prices for gas supplied under the domestic market obligation could be set by international benchmarks, such as Henry Hub, to ensure the international competitiveness of Australian manufacturing.</p> <p>Gas also has a key role to play in firming variable renewable energy through its use in peaking electricity generation.</p>
<p>5. <i>How feasible, and at what scale, are alternatives to natural gas for the electricity sector? You may wish to consider renewable gas alternatives for peaking generation, for example, biomethane and low-emissions hydrogen and other forms of grid-firming technologies like batteries and pumped hydroelectricity. What barriers exist to using these alternatives?</i></p>	<p>The use of biomethane for peaking is inefficient.</p> <p>Its high cost will result in high electricity prices, similarly with hydrogen. Gas peaking generation should be complemented by other grid-firming technologies of sufficient depth and duration.</p> <p>Cost pressures through the supply chain and inflation have impacted the timely delivery of battery projects, and significant planning impediments prevent pumped hydro from being available in time and at the right volume to make a meaningful contribution as an alternative to support a 2030 target.</p>
<p>6. <i>How much longer will you continue using gas as a fuel source or feedstock for your business? Do you think your consumption of gas will decline over time, and if yes, at what rate?</i></p>	<p>BlueScope will constantly use gas. Its consumption will materially increase as technology moves us away from using coal and the indigenous gases produced from current blast furnace operations.</p>

<p><i>7. Are there alternatives that your business can use instead of gas (for example electrification, hydrogen, biomethane or circular economy inputs)? What barriers exist to using these alternatives? How can the substitution of gas be accelerated?</i></p>	<p>Hydrogen is an option, and it will materially reduce the amount of natural gas required, but it is not commercially available at the right price or volume.</p> <p>Under a green ironmaking scenario with hydrogen DRI processes it is possible that natural gas would not be required if biomethane was available at volumes of up to 8PJ p.a. for our needs.</p> <p>Other options such as methane pyrolysis are not at the required technology readiness level (TRL) to proceed with a business opportunity. Hydrogen DRI at Port Kembla Steelworks is not yet possible as transmission infrastructure will not support 1.5GW of firm hydrogen, which will also require 4-4.5GW of renewables for hydrogen generation.</p>
<p><i>8. What factor/s influence your willingness to adopt electric appliances or processes? How could governments support small businesses to decrease gas consumption?</i></p>	<p>High heat processes are unsuited to electrification. Substitution of gas for other processes is negligible for our business and is not being pursued as it diverts much needed resources from larger projects.</p>
<p><i>9. What role might carbon capture, utilisation and storage (CCUS) and negative emissions technologies (NETs) (for example direct air capture and CO2 removal) play in decarbonising industrial processes that are hard to abate in your business or industry?</i></p>	<p>CCS is logistically and commercially difficult given our location as identified in Figure 12 of the Consultation Paper. It is not currently an option for BF-BOF operations. Under NG-DRI process we may be able to incorporate CCS depending on the location of the DRI plant. This is still under investigation.</p> <p>Other negative emissions technologies remain highly prospective and cost prohibitive at this time.</p>
<p><i>10. If your home or small business gas appliances (stove, heating, or hot water system) stop working, would you prefer to keep using gas or switch to an electric appliance?</i></p> <p><i>If you are unsure, what would help you decide? What factors influence your willingness to switch to electric appliances?</i></p>	<p>No comment.</p>
<p><i>11. How can governments, industry and households work together to manage impacts for homes?</i></p>	<p>No comment.</p>
<p><i>12. What do you see as the role of gas in Australia's net-zero transformation?</i></p>	<p>See comments on pages 1-3 above.</p>



<p>13. What action is your industry or company taking to reduce greenhouse gas emissions and does gas use have a role to play?</p>	<p>See 'Efficiency and renewable gases' and 'Low emissions iron and steelmaking study' on pages 4-5 above.</p>
<p>14. How can Australian LNG accelerate global decarbonisation without compromising energy security or affordability?</p>	<p>Use of Australian LNG to supply industries that are decarbonising by substituting natural gas to replace coal is likely to accelerate global decarbonisation, and support affordability and supports energy security.</p>
<p>15. What measures will increase the transparency of LNG supply chains, including their environmental, social and governance impacts?</p>	<p>No comment.</p>
<p>16. Does current gas transport and storage infrastructure support the changing role of gas in the residential and commercial sector? If inadequate, what is needed and who should provide the change?</p>	<p>No comment.</p>
<p>17. What role will LNG – and Australian LNG in particular – play in your economy's energy transition?</p>	<p>No comment.</p>
<p>18. What is your economy's current LNG demand and how do you predict this will change through to 2035 and beyond to 2050?</p>	<p>No comment.</p>
<p>19. What options should the Australian Government consider to ensure international investment in Australian LNG projects remains competitive?</p>	<p>No comment.</p>
<p>20. What value do you place on low or net zero emissions LNG production?</p>	<p>No comment.</p>
<p>21. What is the role of offshore acreage releases in the context of consumer demand and emissions targets? What factors should the Australian Government consider when releasing acreage?</p>	<p>A proportion of new gas supply from offshore acreage releases should be reserved for domestic use. Domestic reservation has been successful in supporting investment in processing and manufacturing in Western Australia (WA Domgas policy), and more recently in Queensland (Qld tenement reservation).</p>

<p>22. <i>How could the offshore petroleum regime be improved to meet the objectives of the strategy?</i></p>	<p>No comment.</p>
<p>23. <i>What are the major barriers and opportunities for new supply? How can the Australian Government prioritise, mitigate or manage these?</i></p>	<p>Inconsistent approaches by State governments (e.g. Victoria and NSW) when it comes to new gas developments. The lack of new gas developments in eastern Australia will lead to significant increases in gas prices, in turn placing at risk future decarbonisation projects like BlueScope's.</p>
<p>24. <i>What are some of the opportunities for gas production in Australia in the medium (to 2035) and long term (to 2050)? How could these necessary developments support decarbonisation consistent with achieving emissions reductions goals?</i></p>	<p>There are three major opportunities for new Australian gas production to 2035 and 2050:</p> <ol style="list-style-type: none"> <li>1. Beetaloo basin in the Northern Territory</li> <li>2. Browse in Western Australia</li> <li>3. Release existing gas supply used for LNG plant own-use to limit need for more gas projects. This would support decarbonisation by repurposing gas to demand shift so that gas is used in the right part of the hierarchy.</li> </ol> <p>A priority should be placed on getting the additional gas into the eastern Australian market with preference give to industrial customers switching from coal to gas as this aids decarbonisation.</p>
<p>25. <i>How can the Australian Government better communicate and provide more transparency to local communities regarding gas projects?</i></p>	<p>Governments should be actively and comprehensively working with project proponents to engage with local communities.</p>
<p>26. <i>What opportunities exist to improve engagement and consultation processes with industry?</i></p>	<p>Better engagement and consultation by all governments would be beneficial. The Energy and Climate Change Ministerial Council is the best forum for this.</p>
<p>27. <i>How can all levels of governments better support the industry to engage with First Nations people and community groups?</i></p>	<p>All level of governments should be working closely with First Nations people when projects are proposed. This engagement should be on-going during project development.</p>
<p>28. <i>How can Australia support the potential for cost-effective, safe and verifiable CCS projects, including for the gas sector, other industries and our region?</i></p>	<p>Funding and cost support to connect east coast emitters in locations not suited to CCS or, if this isn't economic, other support to help transition businesses to other technologies faster.</p> <p>Planning support and approval to ensure assets are harnessed to CCS and low carbon outcomes.</p>

	<p>Ultimately, recognise the potential and actively promote this with more agnostic policy settings. Hydrogen Headstart provides support for the H2 industry, and this is some way off. CCS may be a more appropriate option sooner with comparable opportunities.</p> <p>Understand the role of CCS globally and the lessons learned around funding, support, social licence etc.</p>
<p><i>29. How can the Australian Government better communicate and provide more transparency to local communities regarding CCS projects?</i></p>	<p>No comment.</p>
<p><i>30. How fit for purpose is Australia's gas transmission and distribution network?</i></p>	<p>Transmission and distribution networks are currently fit for purpose, though they are not adequate for a hydrogen blended future.</p> <p>The cost of augmentation will be capital inefficient for both transmission and distribution as the Victorian residential demand ban drives electrification. It will mean that those left will pay more and for less benefit.</p> <p>The focus should be on how the pipelines remain fit for purpose by using NG with either biomethane through the pipeline or the use of complementary technologies such as CCS to abate carbon.</p>
<p><i>31. What changes should be made to the transmission and distribution network to prepare for the changing profile of gas demand in Australia? What risks and opportunities would this entail?</i></p>	<p>No comment.</p>
<p><i>32. Could the construction of LNG import terminals contribute to improving energy security in Australia?</i></p>	<p>Construction of LNG terminals could improve energy security in Australia. However, the cost of delivered gas would be significant.</p> <p>BlueScope would be challenged to undertake its decarbonisation projects if it had to depend on imported LNG given the large volume of gas required. LNG import terminals will drive a permanent structural shift from export parity pricing to import parity pricing – resulting in the loss of one of Australia's fundamental competitive advantages.</p>
<p><i>33. Under what conditions would LNG import terminals be commercially viable in Australia?</i></p>	<p>It is unclear whether they would be commercially viable for BlueScope.</p>

<p>34. Are you able to attract and retain the workforce and skills you need? How will these shift as we transition to net zero emissions?</p>	<p>Our preference is to convert the coal-based blast furnace to natural gas based direct reduced iron at our existing Port Kembla Steelworks in NSW where we have an existing and highly skilled workforce. The main challenge with Port Kembla is gas availability and price. If sufficient volumes of gas at an internationally competitive price are not available on the east coast the DRI plant may need to be constructed in another location such as Western Australia where the availability of skills and workforce are less clear.</p> <p>In the absence of being able to domestically secure cost competitive natural gas to support the transition to low emission iron and steelmaking, the longer-term viability of ironmaking in Australia will be challenged.</p>
<p>35. What are your long-term business and investment plans beyond 2035? How might these affect local economies, employment and communities?</p>	<p>No comment.</p>
<p>36. Describe the projects or best practice examples of industry engagement with the local community, as well as the benefits these projects bring to the people and regional economy.</p>	<p>No comment.</p>
<p>37. How has the oil and gas industry impacted the local economy and employment opportunities in your region?</p>	<p>No comment.</p>
<p>38. What actions will assist workforce retention, upskilling and mobility in your community as the economy transitions to net zero emissions?</p>	<p>Sufficient volumes of natural gas (40PJ/annum) at internationally competitive prices are the key requirement to secure long-term lower-emissions ironmaking in our existing community. There are several actions the government can take to assist with this including:</p> <ul style="list-style-type: none"> <li>• Implementing a national domestic gas reservation policy.</li> <li>• Policy and regulatory consistency at the Federal, State and local levels including removal of inconsistent approaches in relation to new gas developments and harmonisation of environmental approvals processes.</li> <li>• Provide incentives for existing gas users to shift to electrification where viable as this will free up gas availability for other users.</li> </ul>
<p>39. What are the risks to Australia's domestic gas security in the medium (to 2035) to long term (to 2050) for your industry and how can these be addressed?</p>	<p>The biggest risk confronting BlueScope in the medium and long term is the availability of internationally competitive gas supplies. Without it, BlueScope's decarbonisation ambitions would become much more challenging.</p> <p>All governments – Federal, State and Local – need to work together to avoid policy and regulatory inconsistency. This will impede the development of new gas supplies that are critical to BlueScope's and Australia's decarbonisation focus.</p>

<p><i>40. What do you see as the biggest risk to the ongoing affordability of Australia's domestic gas supply? For example, what are risks to affordability in the wholesale or retail market?</i></p>	<p>Without more gas being made available either through new developments or freeing up of existing gas usage through greater focus on electrification at LNG facilities, gas will become more expensive.</p> <p>This poses the greatest challenge to BlueScope's goal of decarbonising its operations.</p>
<p><i>41. What reforms can be made at a Commonwealth, state, territory, or industry level to allow gas supply to be more responsive to domestic demand signals?</i></p>	<p>Removal of inconsistent approaches in relation to new gas developments. For example, Victoria and NSW are effectively locking up their gas deposits.</p> <p>Likewise, greater harmonisation of environmental approval processes at the Federal and State levels should lead to speedier approvals without diminishing environmental outcomes.</p> <p>A proportion of new gas supply should be reserved for domestic use. Domestic reservation has been successful in supporting investment in processing and manufacturing in Western Australia (WA Domgas policy), and more recently in Queensland (Qld tenement reservation).</p>
<p><i>42. What actions are available to lower gas costs, including substitution and new supply, to provide certainty to consumers? How would these actions further the Australian Government's decarbonisation goals?</i></p>	<p>Provide incentives for users to move away where commercially viable alternatives exist. For instance, LNG producers are the single largest users of gas. This consumption could be significantly reduced if they electrified their liquefaction processes.</p> <p>This would free up gas for processes where electrification is not an option – e.g. BlueScope's potential DRI investment.</p> <p>In turn, this would help in Australia's decarbonisation efforts.</p>
<p><i>43. What opportunities exist in your industry to decarbonise supply chains?</i></p>	<p>As noted, there are significant opportunities to decarbonise subject to the availability of internationally price competitive gas supplies.</p>
<p><i>44. Do you use any forecasts of gas supply to inform your outlook of the gas market? If so, what are they?</i></p> <p><i>You may also wish to consider whether these forecast scenarios consider the technical and commercial uncertainties associated with gas reserves and resources. Which scenarios do you consider best reflect the supply outlook?</i></p>	<p>No comment.</p>

<i>45. Are there any limitations or caveats associated with these scenarios? How do you address these limitations?</i>	No comment.
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