

3 November 2022

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Climate Change Review Team
NSW Environment Protection Authority
Locked Bag 5022,
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Dear EPA

RE: ASBG's Submission on draft Climate Change Policy and draft Climate Change Action Plan

The Australian Sustainable Business Group (ASBG) welcomes the opportunity to comment on the *draft Climate Change Policy (CCP) and draft Climate Change Action Plan (CCAP)*.

The [Australian Sustainable Business Group](http://www.asbg.net.au) (ASBG) is a leading environment and energy business representative body that specializes in providing the latest information, including changes to environmental legislation, regulations and policy that may impact industry, business and other organisations. We operate in NSW and Queensland and have over 100 members comprising some of of Australia's largest manufacturing companies and other related businesses. ASBG fully supports a smooth transition to a net zero greenhouse gas emissions future.

1 OVERVIEW

ASBG fully supports the smooth transition to a net zero Green House Gases (GHG) for Australia, with 2050 being the desired timing. With support comes a caveat that a smooth transition should occur across Australia and this be achieved at a reasonable cost, not at any cost. ASBG is concerned NSW's Net Zero targets may significantly negatively impact on NSW Environment Protection Licence (EPL) holding sites, especially those, which have competition with imported products, with higher GHG intensities. Ultimately ASBG supports the vision that good assistance, guidance and oversight by the NSW agencies, including the EPA, will assist such affected EPL holders, and other NSW manufactures, to transition to globally competitive products with low to net zero GHG intensities, permitting increased production in NSW into export markets which support such products. This approach is also reflected in NSW Government Net Zero Implementation Plan, quote:

Achieving this outcome of low to net zero GHG intensity products will require collaboration between industry, the electricity power providers, especially to the manufacturing outputs which have price competitive imported products with higher GHG intensities.

Moving to this newer energy mix will require considerable intellectual capital, choosing the best innovative process and energy mix, assistance with CAPX, and a smooth transition of supplied energy in terms of electrical and natural gas replacements. However, achieving a smooth transition is difficult and is likely to

come with considerable costs. As a result of recent world events ASBG considers there are doubts such a smooth transition can be achieved in NSW's electricity market. Members are concerned the costs and global energy and economic ramifications will result in a high energy costs and potential for failures of supply to meet demand especially over the next 3 to 7 years. A smooth transition must be done by avoiding electricity bill shocks (e.g. not more than 10% pa), circumvent shortfalls in supply (black outs or similar). Also that the NSW EPA not act unilaterally in enforcing Net Zero targets on EPL holders if the transition process is not smooth.

ASBG foresees an outcome where NSW and Australia can provide products and services to the world with a competitive advantage of low or better net zero GHG intensity products. This will increase NSW's market share not only in NSW but across Australia and globally, or at least those countries taking action. Obviously achieving this should increase the manufacturing base of NSW and providing more highly paying manufacturing jobs, reversing the current trend. Note the NSW EPA will play an important part, including ensuring the GHG intensities claimed are as claimed. Such action will establish NSW and Australia as a key supplier of products to countries with Carbon Border Adjustment Mechanisms (CBAMs).

In reviewing the CCAP ASBG supports the EPA's intention to:

- *...implementing our climate change actions in a staged way.*
- *... working together with our regulated community as we transition to a low carbon economy.*
- *{To} listen, learn and gather information from our environment protection licensees,*
- *Based on feedback from industry and our analysis and research, we will then progressively set feasible, evidence-based emission reduction targets for key industry sectors we license.*

The issues in the CCAP is in the detail, in how EPA will work with those EPL holders, especially product manufacturers to achieve ultimately a growth in NSW EPL manufacturing via low GHG intensity products over time. As the majority of NSW EPL holders also look forward to a net zero future, many will look to the EPA for additional guidance and potentially assistance, as well as a checking process. Punitive actions, including EPL conditions by the EPA should only apply to the laggards, who fail to provide reasonable reasons for not achieving their industry sector goals on GHG reductions.

1.1 ASBG Members Are Already Undertaking GHG Lowering Actions

The Climate Change Action Plan is one to add to a number of existing climate change policies, measurement, reporting and framework actions undertaken both within NSW, Australia and internationally. ASBG members are a broad set of largely EPL holders with some representing the mining sector, electricity production, large, medium and small energy users. Some have been dealing with lowering their Greenhouse Emissions (GHG) for many years.

Many are subsidiaries of international companies and are driven by their head offices accordingly. A large percentage are manufacturers, some of which use natural gas for their boilers and other heating requirements. As a consequence, their approach to GHG reduction will be varied, even within industry sectors. Some will have comprehensive data on their current emissions and planned mitigations.

Overall ASBG members are driving towards a net zero GHG future. ASBG looks forward to the consultative process and where ASBG and its members can work with the NSW EPA to establish reasonable, achievable frameworks and layouts for CCMAPs. Targets and plans can then be considered where it has meaningful outcomes and considers energy costs and market conditions along with GHG emissions reductions.

2 ARE THE NET ZERO TARGETS THE FUNDAMENTAL GOALS?

ASBG considers the differences of focus between NSW energy agencies and their views on industry participation into a net zero future and the EPA's, based on their CCP and CCAP, requires urgent clarification. Does the NSW EPA and (or) NSW Government provide a higher goal on either of these two major policy positions:?

1. NSW will meet its the ambition of a NSW 50% reduction in Scope 1 emissions by 2030 (compared to 2005 levels) and net zero Scope 1 emissions by 2050, regardless of the costs, potentially resulting in lower production levels of NSW products; or
2. Net Zero will be a goal as long as its costs impacts and NSW Environment Protection Licences (EPL) holders' competitiveness are reasonable, permit change, with medium to long term growth realised. A parallel key goal that the global emissions of greenhouse gases from NSW are kept as low as possible, and NSW industry can play a leading role in achieving this, by producing low or net zero products with NSW Government support. Constraining NSW EPLs, in competitive markets to Net Zero targets so their production is materially reduced, is to be avoided, as this will reduce control over NSW production and lead to a net increase in total GHG emissions when higher GHG intensive imports replace local products made in NSW.

If item 1 has Priority:

The following statements, seems to support Net Zero Target regardless of issues; in the *CCAP 6 Stronger Regulator Response* that the EPA will consider in the future:

*Over the life of this action plan, we'll be monitoring how NSW is tracking against its net zero targets.
.. We're committed to strengthening our regulatory response in the medium to longer term if it is required to support the NSW Government's climate change actions and commitments, including the NSW net zero targets.*

This is one of many examples in the CCAP where the Net Zero Targets appear as the only goal for NSW EPA. However, this is somewhat moderated with the EPA's intention to "*step into the regulatory space in a way that is deliberate, systematic, well-informed and properly paced.*"

There are fears on how the Net Zero targets, identified in the CCP & CCAP will and could be enforced.

ASBG members are concerned about how much the EPA will adhere to the Net Zero Plan if there is a failure in the transition process. This would result in little options for such affected EPLs to reduce GHG emissions— assumed to be Scope 1 only— regardless of the costs, including high future electricity prices, or lack of supply of energy and lack of low GHG energy is available.

ASBG members fear the enforcement of the Net Zero Targets on EPL holders in NSW with external competition – generally from imported products from other states and overseas— may proceed despite that replacement products have a higher GHG intensity¹. So EPLs, which do not comply in achieving Scope 1 and greenhouse reductions, under Net Zero targets, will be forced to face potentially increased production costs or close. If they cannot compete in the NSW market place, imported products will simply dominate. Even if the imported products are made using the same carbon intensity processes as in NSW, the greenhouse emissions will be higher due to the transportation emissions. Without such considerations, reducing the

¹ Note the CCAP states that higher emitters such as power stations etc. will be exempt from the controls. As most, if not all of these have no imported competition, this leaves largely many manufactures, who have external competition, totally exposed to the full CCAP controls

production levels or closing of NSW manufacturers, via tight EPL conditions, will simply increase the global emissions of greenhouse gases due to the imported products.

While NSW may claim its Scope 1 emissions are lower at 50% by 2030, it has no control over imported products which will be replacing local and likely promotes increased greenhouse emissions globally. Such a result may occur if EPA forces NSW's Net Zero targets on local EPL holding manufacturers, during a costly transition process, with non-corresponding controls on replacement imports. Such action will likely increase global greenhouse emissions, but exports NSW's valued manufacturing jobs and investment. Consequently, following this path NSW Government loses control over the GHG intensities of such local products, and is at the whim of imported products, which it has no controls over. Overall such an outcome is counter to lowering global, even Australian greenhouse emissions as it only focuses on NSW emissions.

If Item 2 Has Priority:

NSW Energy agencies and the Government seems to consider Option 2 is more important:

By reducing barriers to the adoption of low emissions business models, activities under the Plan allow NSW businesses to develop their climate credentials and improve their competitiveness as global demand for low emissions goods and services increases. ... The NSW Government's first priority is to provide a pathway to deploy at scale those low emissions technologies that grow the economy and create jobs.²

Also the NSW Electricity Strategy says:

*Second, if the market does not deliver the firm and flexible generation needed to ensure a prudent level of capacity in the electricity system, the NSW Government will take action to address any resulting capacity gaps in a way **which also financially protects taxpayers and consumers** and does not encourage market participants to delay investment decisions to take advantage of government action.*

Under this approach EPL holders, especially those in competitive markets, would be assisted so their products can be lower in GHG intensity, driving towards zero. Here local NSW manufacturers with EPLs will be working with EPA, Department of Industry, Department of Energy, and other agencies to change their productions so that NSW local products will be cost competitive with imports and demonstrate a lower greenhouse emission profile per unit compared to its competitive imports. This approach allows for the NSW Government to retain control over its local products, rather than reducing their competitiveness also in terms of their GHG intensities.

While the NSW Government has no powers over imports, but it can have power over local manufactured products, which should be encouraged, based on lower GHG intensities and improving their competitiveness. Consequently, the NSW Government could liaise with the Commonwealth, who does have such powers to consider a process similar to the EU CBAM method and also require information on GHG intensities on a range of imported competitive products. Such a move has been fully considered by the EU to protect local industries from high GHG intensity products, even though it is a border protection, it will occur.

EPA's role would include part auditor and oversight agency providing acceptable GHG emissions intensities per unit made. EPA would also have a role of enforcement on laggards who offer no reasonable excuse. Other departments will provide grants, funding arrangement and also assistance to such EPL holders to embrace and be a low emission company. This will also promote their product uptake in other Australian states and territories and improve export to other countries, especially those with or considering future Carbon Border Adjustment Measures (CBAM).

² [Net Zero Plan Stage 1: 2020-2030 Implementation Update](#)

ASBG Recommendation R1: NSW Government and EPA to clarify and ensure the main goal in greenhouse gas reduction is for NSW, Australian and global emissions to be reduced over the secondary goal of cutting NSW's Scope 1 emissions to 50% by 2030 and net zero by 2050. This will be achieved by:

- **Working with NSW trade exposed EPL holders to permit them to make lower greenhouse gas emissions per unit of production (GHG intensive) compared to their main, external to NSW, competitors and their products used in NSW.**
- **EPA to assist, where required, in checking the GHG intensity levels**
- **NSW Government working with the Commonwealth Government, to over time, extract GHG intensity information from imports to EPL holders, with future controls considered.**
- **Working with other States and Territories to encourage them to adopt similar assistance packages for manufacturers over a threshold, where they face international product competition, so they can generate lower GHG intensive products.**
- **Providing low cost low carbon electricity with the increased supply to cater for a switch from fossil fuels to electricity or other low carbon manufacturing processes.**

3 ELECTRICITY TRANSITION AND SUPPLY CONCERNS

ASBG and its members are very concerned over the ability of the NSW Government to transition to a 50% GHG reduction in the electricity power generation by 2030 and net zero by 2050.

A significant concern over a potentially high cost transition is the proposed [closure of Eraring Power Station](#) by 2025, rated at 2,000 MW, will be difficult to replace its total annual energy output in TWhr, using renewable energy. ASBG estimates that at 75% utilisation, Eraring replacement would require at least 10 [Sapphire Wind Farms](#) – largest in NSW - (75 x 3.6MW at 30-35% utilisation), plus energy storage.

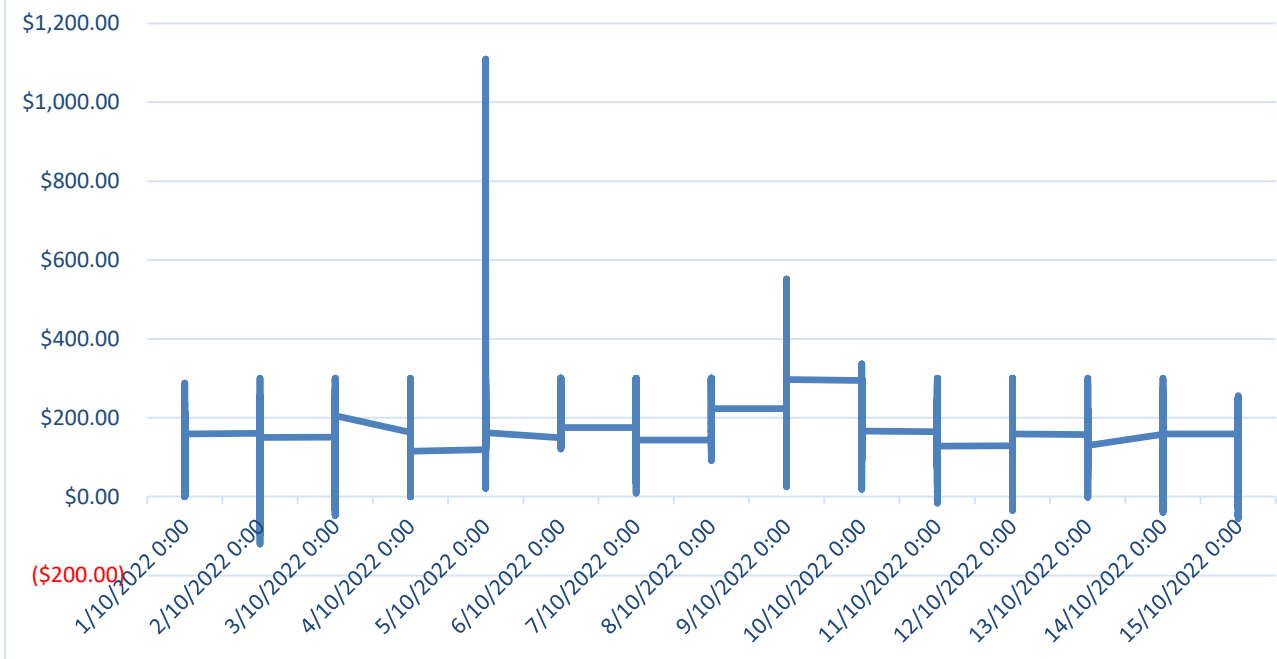
However, requiring industry to switch from fossil fuels to renewable electricity will double electricity demand by 2050, then add in switch to electric cars, this would require a tripling of electricity production in NSW so 100's of Sapphire Wind Farms by 2050. However, AEMO's program is simply not fast enough to barely cover Eraring, less the other coal fired powered stations and far less than the tripling needed by 2050. ASBG considers AEMO and other agencies are only partly to blame as it has been ambushed by the coal power station operators and owners, who are pushed due to high coal and gas prices as a result of the Russian Ukraine war and corresponding sanctions and the increasingly variable daily wholesale market due to a lack of electricity storage not well matched with renewable outputs.

The Net Zero State 1 Implementation Plan 2020 -2030 states:

Most importantly, the Roadmap will significantly reduce the price of electricity in New South Wales. Cheaper household electricity bills will increase disposable income and business investment to a level forecast to support an increase of 23,600 jobs from 2032–2037.

When this Plan was released in March 2020, it did not recognise the difficulties associated with the higher coal and gas prices and the knock on effect to close coal fired power stations, such as Eraring in 2025, Loy Yang B closure in Victoria in 2035 and the impacts of the Russian-Ukrainian war on global energy markets. In addition, the NSW electricity wholesale market makes considerable oscillations from commonly \$300+/MWhr to —\$200MWhr.

Figure 1: NSW Whole Sale Electricity Prices \$/MWhr 1-15 October 2022



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The reason for the large fluctuations in NSW whole sale electricity prices are the impacts of renewables, largely solar and wind. So when the weather is good renewables operate close to their name plate outputs, albeit for a short time, consequently between 11 am and 1 pm is peak generation time for renewables. Also the peak demand time is now in the afternoon around 5pm to 6 pm, which does not favour solar energy. On 5 October prices spiked to \$1,190/MWhr for ½ hour. As shown in Figure 1 on 9 October prices remained over \$299/MWhr from 17:20, peaking at \$551.71/MWhr at 19:05 until shortly after midnight, showing a major drop in renewable supply due to night and low winds. Hence the need for more storage in the NSW electrical grid.

Another reason for the advanced closure plans of coal fired power plants, is that they cannot switch off when wholesale prices dip below \$50 MWhr, which roughly is their breakeven point. So prices going as low as -\$200/MWhr is financially difficult. Eraring has proposed it will build a storage battery next to its plant rated at 2,800 MWhr with peak power output of 700 MW by 2025. This would be the largest battery storage in NSW. It is not known if this will proceed given the announced closure of Eraring.

³ Source AEMO: <https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/data-nem/aggregated-data>

3.1 NSW Grid Battery Status

Name	Peak Output MW	Max Storage Capacity MWhr	Comment
Latitude Solar	5	11	Provides some dispatchable for farm
Wallgrove Road	50	75	Transgrid for system stability
Total	55	86	Quite small for NSW;s grid

ASBG has looked at the proposed battery systems for NSW, of which there are two with a capacity of 86 MWhr. This again shows that NSW is simply not prepared for the closure of Eraring. While there are many announced there is some doubt if these will be constructed. Note there are no grid batteries under construction according to the website.

Name	Peak Output MW	Max Storage Capacity MWhr	Comment
Eraring battery	700	2,800	Largest in NSW for 2022, will it get built?
Kurri Kurri	1,200	400	Unconfirmed, but build date 2023
Liddell Power Station Battery	500	500	Cost is \$763m CAPX, expected by 2025
Waratah Super Battery	700	1,400	To be built by 2025
NSW Diverse	150	300	Uncertain if it will be built
Queanbeyan Battery	10	20	
Darlington Point	125	260	Support for the solar farm, near Griffith
Sapphire Battery	30	30	Support for the wind farm, near Inverell
Sunraysia Emporium	100	200	Support for the solar farm
Total	3,515	5,910	Not quite 3 hrs of Eraring's output

While there are 9 grid batteries proposed, and their peak output will be more than Eraring's 2,000 MW, the time for depletion about 3 hours at Eraring's rated output. Consequently, the claim that the proposed grid batteries will replace Eraring is considered false. Interstate connections may provide some relief, but both Victoria and Queensland are also have or have rethought their new energy mix required by 2030 or 2035 and may not have the capacity to cover NSW's shortfalls post 2025.

ASBG members require reassurance with guarantees that electricity supply will not be disrupted from the closure of Eraring and in the future other coal powered generators. If this cannot be guaranteed supported by a published full analysis, then NSW should ensure that enough electricity will be supplied and that prices will not spike due to the transitions or shortfalls. This may include, ensuring that fossil fuelled fired power stations are assisted to continue operations until suitable low or net zero electricity can be supplied.

⁴ From <https://reneweconomy.com.au/big-battery-storage-map-of-australia/>

⁵ From <https://reneweconomy.com.au/big-battery-storage-map-of-australia/>

3.2 Need for Vastly Increased Renewables

Recently the forecast price of retail electricity is to rise 34% this year and more next year, with the Federal Budget predicting 50% increases. So the claim that prices will decrease appears false.

Australia's current renewable power percentage is [18.64%](#). The [State of the Environment Report \(SoE\) 2022](#) states NSW's renewable power percentage is 19% of which solar and wind combined is 14% and hydro is 4%.

Eraring can make 17.52 GWhr operating at 100% for a year. However, the high cost of coal and other factors mean that Eraring has been operating at around 75% of full capacity. This means it makes about 13.14 GWhr per annum currently, which is about 20.37% of NSW total electricity demand. Importantly, this is more than the SoE report's total renewables contribution. So to replace 13.14 GWhrs/yr will require more than a doubling of the renewable generation capacity, or as put another way, 10 Sapphire Wind farms plus appropriate energy storage and perhaps alternative uses such as making hydrogen on good days where there is plenty of sunshine and wind.

ASBG is very concerned that roughly doubling NSW's renewable capacity by 2025 including support from new storages is simply not feasible perhaps helped by interstate importing, but that is unlikely make up the differences. As a consequence, after the closure of Eraring, NSW is likely suffer from electricity shortages post 2025, As a consequence, NSW could expect to receive rolling blackouts, brownouts, power surges and massive increases in electricity prices, due to a massive renewable electricity infrastructure investment post Eraring's closure.

In addition, Energy NSW is planning for 30% of new car sales to be EVs by 2027. This will impose increased demand for electricity in NSW, but as discussed above, NSW will have a shortfall of electricity supply. Adding to electricity demand when there simply is not enough time to build the renewable generators and storage facilities fast enough to meet current demand. Add to this the population increase and the NSW Net Zero targets appear unreachable by 2030, unless NSW goes into energy poverty.

3.3 Avoiding Energy Poverty

Overall, the current market forces and the early closure of Eraring could mean NSW may face similar issues the UK does now by 2026+⁶. The current building rate of renewable electricity supply is simply too slow, requiring at least a doubling of its NSW capacity plus energy storage by 2025, which is not feasible, considering it has taken over 15 years to build the current supply. There are claims that some new renewable installations can generate 3,000 MW of power, but this citing the name plate maximum power output when wind or sun conditions are ideal. For wind the real average power output over a year is around 30% and for solar around 15-20% of their name plate power. This is why they must be supported by energy storage systems, but NSW

⁶ See <https://commonslibrary.parliament.uk/research-briefings/cbp-9491/>

only has 86 MWhr currently, so a long way to go, with increasing costs, due to demand and exchange rates.

Recommendation 2: For the NSW Government that the transition to low carbon electricity be undertaken smoothly; without high costs and without shortages where demand exceeds supply. If this cannot be achieved, temporary alternative power sources be planned and ready to deal with supply shortages and cost shocks.

If NSW is to adhere to its Net Zero targets without a smooth transition, then NSW may enter energy poverty; industries will be forced to cease production, jobs will be lost, possibly exported and householders will suffer. High electricity prices will cause the death rate in NSW to increase. Why? There are many scientific articles on increased death rates associated with for high energy prices or electrical energy poverty, for example:

- Extreme temperatures. Climate change is already exacerbating temperature changes. In NSW high electricity prices will make people avoid air conditioning leading to increased death rates.
- Persons requiring continuous electricity supply for essential medical equipment will be affected by brownouts and blackouts.
- Food will spoil as the result of failing refrigeration. Food prices will increase, leaving people with the difficult choice between eating acceptably and cooling or heating well.

Put simply NSW may be faced with the difficult choose between achieving NSW's Net Zero targets and higher death rates or ensuring Eraring and or other power stations, including fossil fuelled ones remain operational until adequate replacement renewable power and storage is available ensuring a smooth transition process.

Recommendation 3: If the transition process is poor, and or NSW's Net Zero Targets cannot be achieved, the EPA will take the increased electricity supply costs, and if occurs, the decreased supply reliability, into account and adjust industry sector GHG outcomes associated with Climate Change Policy and Action Plan.

Essentially, there needs to be a circuit breaker over adherence to the Net Zero targets, if they cannot be achieved. The EPA in how it enforces GHG limits and other requirements, may need to apply this circuit breaker and apply lower targets than the Net Zero targets set.

4 AVOIDANCE OF DUPLICATION OF REPORTING UNDER THE ACTION PLAN

The Climate Change Action Plan (CCAP) contains actions, which will increase the administrative burden of holding an EPL especially when EPL holders complete a CCMAP. However, there is already a wide range of climate change policies and reporting systems across Australia and internationally. Overlap between these and the CCAP reporting and action requirements is considerable. While the EPA acknowledges this potential overlap and its CCAP intent is to compliment them ASBG has seen many example of duplication where virtually the same data is required, but formatted in the agency's desired manner. This in itself also creates administrative burden. Some of the main CCAP areas where this is a concern includes:

- **New action 2(b) Progressively require and support our licensees to prepare, implement and report on Climate Change Mitigation and Adaptation Plans:** Reference examples are made to ...greenhouse gas management plans (required by DPE Planning), or ...statements about an organisation's exposure to climate-related risks (known as TCFD Statements)
- **New action 7 – Develop a series of greenhouse gas emission reduction targets and related pathways for key industry sectors we license, to help guide our regulatory effort**
- **New action 9 – Progressively place greenhouse gas emission limits and other requirements on licences for key industry sectors**

At least there is some recognition of such duplication in the CCAP, but ASBG considers there needs to be a listing of all recognised reporting not limited to other NSW requirements, including Commonwealth Government and key international one of both mandatory and voluntary requirements that are deemed useful to the EPA. Preferably such complimentary documentation will be permitted to be supplied as separate unmodified documents.

Recommendation 4: The EPA in identifying GHG data on EPL holders:

- ***To rely on other official documentation in its current form, rather than require similar or duplicative information and data provided in EPA's format.***
- ***Publish a list of acceptable GHG data documents which are where available, be supplied in CCMAPs.***

5 USE OF LICENCE CONDITIONS TO CONTROL GHG

The NSW Government, in particular its energy agencies have made it clear they are to follow the Option 2 (see section 2). However, it is not clear that the NSW EPA will use Option 2. If it does how flexible will the NSW Net Zero target be? To provide an example consider NSW Electricity Strategy, which states:

*Second, if the market does not deliver the firm and flexible generation needed to ensure a prudent level of capacity in the electricity system, the NSW Government will take action to address any resulting capacity gaps in a way **which also financially protects taxpayers and consumers** and does not encourage market participants to delay investment decisions to take advantage of government action.*

... For households, the Strategy will lead to estimated bill savings of \$40 per year.

The above indicates some form of financial protection to consumers, which is considered to include EPL holders. Nevertheless, the EPA seems intent on using legal means to enforce EPL holders to adapt mitigation measures. For example, the CCAP states:

We'll also consider using licence conditions to explicitly require practical mitigation and adaptation actions identified in CCMAPs to be implemented. We'll consult with licensees...

The CCMAP for the licence will focus on the operational stage of the project and the ongoing performance of the activity (i.e. minimising emissions and exposure to climate risk).

ASBG can accept there could be a minority of EPL holders, who can afford, within market conditions, to undertake climate change mitigation action, but refuse or are demonstrated laggards. However, the number and types are expected be in the smaller minority. If there is scope for NSW EPL holders in a competitive market to also be assisted they should be more competitive due to their lower GHG intensity products, though such costs are not generally borne by the external products they compete with. However, the CCAP goes on, stating:

We'll focus our efforts by setting targets for where we can achieve the best environmental outcomes (e.g. we're likely to start with high-emitting sectors where there is no other significant NSW or Commonwealth Government emission reduction strategy already in place).

Given that the electricity petroleum and gas supply sectors will be covered almost entirely by the Commonwealth Government emission reduction strategy, largely those captured under the Safeguard System, they will be outside such controls. This will leave largely EPL holders which face *product competition from outside of NSW* to be potentially subject to such EPA controls. ASBG considers competition must be considered, where it exists otherwise, or affected EPL sites will simply reduce capacity, close and potentially relocate in other Australian state or territory generating higher GHG intensity products, which NSW must not prevent to be sold in NSW under s 92 of the Australian Constitution⁷. Even if the competitive products are from overseas, NSW, especially NSW EPA, has no powers to control such external competitive products despite their GHG intensities. Only the Commonwealth does. Again replacement of local products due to local GHG controls, with imported products, in NSW will invariably increase global GHG emissions.

CCAP goes on:

New action 9: Progressively place greenhouse gas emission limits and other requirements on licences for key industry sectors:

⁷ http://classic.austlii.edu.au/au/legis/cth/consol_act/coaca430/s92.html

The EPA will progressively place feasible, evidence-based greenhouse gas emission limits and other requirements on environment protection licences, for key industry sectors that we regulate. In addition to emissions limits, other licence conditions could include:

- *monitoring and/or emission estimation conditions*
- *other performance requirements (e.g. see Box 3: Better management of non-road diesel emissions at coal mines below)*
- *reporting conditions*
- *pollution reduction studies and programs.*

We'll develop these emission limits and other licence requirements to help NSW meet its net zero targets.

ASBG supports the CCAP's position that it will place feasible and evidence based greenhouse gas emissions limits on licences. However, the issue is how flexibly will the EPA treat EPL holders? Will the impact of imported (into NSW) competitive products and its GHG compared to local EPLs be considered in the evidence based assessment? If EPA cannot access or check such data, then it must rely on the evidence provided by EPL holders, subject to simple checks.

Does an entire industry sector require EPL conditions when the vast majority has achieved comparative to availability reasonable GHG reductions? While there is some scope to consider GHG mitigation by industry sector, such a process must consider competitive products and the impact on profitability on affected sectors.

Recommendation 5: That use of GHG limits on EPLs in a competitive market will only be used where it is demonstrated that the main imported products competing with that EPL holder are lower than produced by it. The evidence based GHG limits will not be based solely on the achievements or not of that EPL or industry sector to meet an EPA derived level based on NSW's Net Zero Targets.

6 USE OF LOAD BASED LICENSING AND OTHER MARKET MECHANISMS

Under **S6 Stronger regulatory responses we'll consider in the future** states:

- *We're committed to strengthening our regulatory response in the medium to longer term if it is required...*
- *We use market-based instruments and other economic incentives to regulate pollution...*
- *We'll consider the need for this type of approach if regular reviews and reporting of progress show that a stronger regulatory response is warranted to meet the State's net zero targets.*
- *Market-based approaches could include using **the load-based licensing scheme** and charging a fee for greenhouse gas emissions.*

ASBG appreciates that the above actions will only be implemented if there is poor performance from EPL holders in NSW and may not be required at all.

Nevertheless, this raises many questions:

- At what level will the EPA consider the need to implement LBL fees on carbon emissions?
- Which industries will likely be affected?
- Will there be a threshold whereby certain small EPLs are not affected?

ASBG is concerned that if the Net Zero target is not reached, Load Based Licensing (LBL) will be considered. This is concerning as it indicates the Net Zero target is to be achieved at any cost which shows that Option 1 (see section 2 in this report), Net Zero target is achieved at any cost, is the end goal of the EPA not Option 2. ASBG considers this approach, hypocritical as Scope 1 GHG emissions for NSW dominate over Australian and global GHG emission rates and NSW promotes increasing GHG global emissions. There are many issues in using LBL in such a fashion:

- Will it apply to the electricity suppliers? Note those affected (fossil fuel based) then must either reduce output or close, causing a market short fall (demand is greater than supply) and large electricity price increases, which will affect all of NSW though higher prices. Note the Safeguard Mechanism can result in surrender of ACCU (form of Carbon Tax)⁸ so this is likely to be a double taxation process.
- Will the LBL scheme be used to increase government funding? This can go two ways:
 - A fully hypothecated fund to assist industry to lower its GHG scope 1 emissions, or
 - Fatten up internal revenue with no link back to the source of the issue.
- As the Commonwealth Government's Safeguard Mechanism tightens on GHG intensity, those with LBL carbon fees will essentially be double taxed for their carbon emissions. This needs to be avoided.

Recommendation 6: Use of Load Based Licensing on GHG emission should not be used. If that industry sector under an EPL schedule 1 classification, as a whole is unable to demonstrate that it is reasonably mitigating its GHG emissions, other means such as EPL limits on GHG emissions are available.

⁸ <https://www.cleanenergyregulator.gov.au/ERF/About-the-Emissions-Reduction-Fund/the-safeguard-mechanism>

7 ADAPTATION REQUIREMENTS ON EPL SITES

The CCAP and the CCMAP calls for EPL holders to better prepare [Adapt] for climate change weather related risks, such as due to flooding and increased fire risks which are drought related etc. The following CCAP sections deal with these requirements on EPL holders:

- **New action 2(d): Require and support all our licensees to specifically consider how a changing climate might increase their risk of pollution incidents, and require them to update their pollution incident response management plans accordingly** —We'll work with our licensees to ensure that all PIRMPs are progressively updated to consider all relevant climate risks. We'll update our PIRMP Guidelines and ensure our licensees have access to available tools and other guidance to help them assess their exposure to climate risks
- **New action 13: Prepare or adopt climate change adaptation guidance for key industry sectors we license, including the performance outcomes we seek** - These guides will help our licensees prepare their climate change mitigation and adaptation plans.

ASBG understands that increased risk of pollution may occur due to climate related weather changes. However, Material Harm pollution incidents caused by weather related events are of a small portion of all such incidents. Other issues, such as machinery failure, level and alarm failures, human faults, internal fires etc., dominate the Material Harm incidents. Consequently, weather related pollution events are in the minority and are in a lower set of risk causes and probably affect a similar portion of EPL holders. Also the adaptation is based on the assumption that EPL sites can have a higher risk level than non-EPL sites. However, this is not always the case and many non-EPL sites can have significant pollution risks due to bad weather. The issues under the adaptation requirement are summarised:

- The level of climate related weather incidents and how much over the current design criteria is the EPA considering increasing this by?
- Only EPL holders will need to consider these adaptation level requirements. If they are significant in change this would be considered unfair as many other non-licensed developments and infrastructure appears exempt from the same requirements.

ASBG is concerned that the potential new climate related weather events may be set at higher design levels for EPL holders only. For example, the current La Nina floods significantly exceeded the normal planning design levels, typically set at a maximum of 1 in 100-year rain events⁹. If the EPA goes down the path of choosing higher rain event levels or exceeding similarly pre-set standard design levels, ASBG would consider this unfair as only EPL holder would need to comply. Whereas the rest of the built areas would not need to comply, but can generate significant pollution risks during such weather events.

This issue also applies if its applied to an existing site, where changes to water management etc. are well beyond the original planning criteria. For new sites are EPLs are not the only environmental risk types. Consider also freeways, railways, airports and many buildings will also have increased pollution risks. For example:

- Consider a unit block with 100 units. It would likely contain an underground carpark containing parking for about 100 vehicles. If the carpark were to flood the unit block contains over 8,000 Litres of fuels and about 2,000 l of oils and other automotive fluids. All of which are potential pollutants. But this site is not subject to an EPL or the need to operate a PIRMP.

⁹ Most designers use *AS 3500.3 Plumbing and Drainage Part 3 Stormwater Drainage*, or similar design criteria, which is based on historical rain events. Note reference to rain events are based on this reference and the historical data.

- Consider the recent floods and the amount of waste generated and the corresponding pollution in rivers etc., from the general urban and rural areas.
- A field where pesticides and or fertilizers were recently added, then is subject to either fire or flooding.

All can cause a Material Harm scale incident.

ASBG and its members would like to work with the EPA to arrange what are considered appropriate increased levels of pollution control during extreme weather events. However, such controls should not encroach into design criteria such as designing for a flood of 1 in 200 years or more for existing sites. It should only consider *ad-hoc* changes to the potential polluting areas and reasonable mitigation actions. This should apply to all existing sites as non-will have been designed at the planning stage to meet a new flood or fire risk level.

Note if the EPA is to choose an increased flood design level, say 1 in 250 years, (or fire risk levels) to new EPL sites this would need to apply to all NSW designs at the planning stage to be fair, regardless if the development requires an EPL.

Consequently, the adaptation changes required should not include major design changes to existing EPL sites. Such sites should be permitted to develop low cost but effective systems and strategies to deal with the potential for climate change weather related events. For new sites only across the board design changes to all appropriate developments should be considered, but this is more of a NSW Government issue than for the NSW EPA.

Inclusion under both the CCMAP and the site's PIRMP are considered potentially duplicative. ASBG can accept the initial CCMAP could contain weather related adaptation changes, potentially with EPA reviews and response. However, after this initial round the PIRMP should be the main documentation for climate change adaptations only. This would meet the EPA requirement that the EPL site has thought about the issue and developed reasonable controls.

Recommendation 7: In relation to climate change adaptation requirements on EPL holders the EPA to:

- ***Not set new design criteria on EPL sites, such as a new flood event e.g. 1 in 200 years***
- ***Permit ad-hoc changes to areas of increased risk of pollution***
- ***Only require the initial CCMAP to include such adaptation consideration relating to pollution events, with the PIRMP used to identify and improve on such new risk controls***
- ***If increased design criteria is required, it should only apply to new developments based on their risks and not solely on if they are an integrated development.***

This submission was prepared by the assistance of ASBG's Policy Reference Group. Should you require further details and clarification of the contents of this submission please contact me.

Yours Sincerely

A handwritten signature in black ink, appearing to read "Andrew Doig". The signature is fluid and cursive, with a large initial 'A' and 'D'.

Andrew Doig

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