CLIMATE CHANGE LITIGATION

ENVIRONMENTAL DEFENDERS OFFFICE CLIMATE LAW UPDATE

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Introduction

I have been asked to talk about climate change cases in the Land Court. I will focus on mining cases and will do three things:

1. identify when the Court can or might be able to take GHG emissions into account in a mining case;
2. discuss some key factual findings in such cases; and
3. pose some questions about expert evidence in that context.

But first, some background on the Land Court's role. The Court must conduct a Mining Objection Hearing if there is an objection to an application for a mining claim, a mining lease, or an associated environmental authority. A MOH is part of the decision-making process and precedes the decision. It is not an appeal from or judicial review of a decision already made. After hearing the objections, the Court makes a non-binding recommendation to the decision-maker. I have recently issued a Practice Direction for mining objection hearings, developed in consultation with interested parties.[1] If you want to know more about how MOHs will be conducted, I recommend the PD to you.

When can the Court take into account greenhouse gas emissions in a Mining Objection Hearing?

So let me turn to my first topic. When can the Court take into account GHG emissions? Objectors have raised the harm caused by GHG emissions in a number of cases. Most notable are Xstrata's application for the Wandoan coal-mine in the Surat basin and Hancock Coal's application for the Alpha coal-mine in the Galilea basin. The litigation involving those two mines has established the legal framework with some certainty. The legal principles established in those cases have since been applied in hearings involving Adani's application

[1] Land Court of Queensland, *Practice Direction 4 of 2018*—Procedure for Mining Objection Hearings, 30 April 2018.

for the Carmichael mine in the Galilee basin and New Acland's application to develop stage 3 of its Acland coal-mine near Oakey.

As matters stand, I consider the law is clear in most respects and clearish in one. The focus for the parties in future mining cases involving climate change will likely be on the evidence, rather than the law.

But, first, let me address the law by asking a simple question. "Can the Court take into account GHG emissions in Mining Objection Hearings?"

As is often the case in the law, the simple question provokes a complex answer. That is due to two factors.

Firstly, because it depends on the type of approval under consideration. Separate Acts govern the approvals and the Court must take into account different statutory criteria depending on the type of approval. For a mining lease, the *Mineral Resources Act 1989* applies and statutory criteria are prescribed by s 269(4). For an environmental authority, the *Environment Protection Act 1994* applies and statutory criteria are prescribed by s 191 (formerly s 223). As you would expect, the focus of the EP Act is environmental, while the MRA has other criteria relating to the mineralisation and viability. But it also contains an environmental criterion and both refer to the public interest. My focus will be on the environment and the public interest criteria.

Secondly, the answer depends on the type of GHG emissions. The *Greenhouse Gas Protocol,* which sets the accounting and reporting standards used internationally and in Australia, classifies GHG emissions as scope 1, 2 or 3.

Scope 1 & 2 emissions are directly attributable to the company's activities. Scope 3 emissions are indirect GHG emissions *resulting* from a company's activities, but occurring from sources not owned or controlled by the company, for example the transportation of coal and the burning of coal. Scope 3 emissions are of particular significance for new coal mines in Queensland because they are, largely, intended to supply international, not national, consumers.

So bearing in mind those 2 factors – the type of authority (and therefore which Act applies and what criteria) and the type of GHG emissions, the answer to the simple question I posed is - "Yes, No, but Yes, and Maybe." Now that couldn't be clearer could it?

Yes

As far as I can ascertain, no applicant for a mining lease has argued the Court cannot take into account the adverse environmental impacts of scope 1 & 2 emissions. That is not surprising given the direct link to the activities authorised by the mining lease and the miner's national reporting obligations.

No

The situation with scope 3 emissions is more complex. The primary criterion that you might think would apply is any adverse environmental impact caused by those operations. However, because of the causal requirement in the MRA s 269(4)(j), this criterion does not apply to scope 3 emissions. The primary reasoning about this issue is found in the judgment of the former President of the Land Court, President MacDonald, in *Xstrata Coal Queensland Pty Ltd & Ors v Friends of the Earth*.[2] President MacDonald decided the Court could only consider the adverse environmental impact caused by the activities of winning and extracting the coal, thereby excluding scope 3 emissions. The Court has consistently applied that reasoning. Member Smith did so when hearing the application for Hancock's Alpha mine.[3] Justice Douglas reviewed Member Smith's decision and endorsed his adopting and applying that reasoning.[4] On appeal, the Court of Appeal found no error in that decision.[5] So you can take it the interpretation of s 269(4)(j) is settled.

[2] *Xstrata Coal Queensland Pty Ltd & Ors v Friends of the Earth – Brisbane Co-op Ltd & Ors and Department of Environment and Resource Management* [2012] QLC 13, [509]–[570].
[3] *Hancock Coal Pty Ltd v Kelly & Ors and Department of Environment and Heritage Protection (No. 4)* [2014] QLC 12, [212].
[4] *Coast and Country Association of Queensland Inc v Smith & Anor; Coast and Country Association of Queensland Inc v Minister for Environment and Heritage Protection & Ors* [2015] QSC 260, [30]–[47].
[5] *Coast and Country Association of Qld v Smith & Ors* [2016] QCA 242.

but Yes

But the door is not closed on scope 3 emissions entirely. Two other criteria are relevant under the MRA:

- whether the public right and interest will be prejudiced (s 269(4)(k)); and
- whether any good reason has been shown for a refusal (s 269(4)(l)).

In *Xstrata*, President MacDonald accepted climate change is clearly a matter of general public interest and GHG emissions may militate against the grant of a mining lease.[6] She also accepted it might be a good reason for refusal.[7] Her decision to recommend granting the lease taking into account the climate change objections, was made on the evidence. I will return to that later. As matters stand, though, depending on the evidence, the Court could recommend against the grant of a mining lease on climate change objections relating to scope 3 emissions.

and Maybe

I said the law was only clearish in one respect and I turn to that now. That is the "and Maybe" answer. This relates to whether the Court can consider scope 3 emissions when considering an environmental authority. President MacDonald's judgment in *Xstrata* dealt with this as well. The relevant provision was then s 223 of the EP Act (now it is s 191). There are some differences in wording, but the important reference in both sections is to the standard criteria. That is a defined term in the EP Act. Although the definition has changed since *Xstrata*, and also since the Court of Appeal decision in *Coast and Country Association of Qld v Smith & Ors* (the Hancock Alpha mine appeal), the change is not material for the purpose of this analysis.

In *Xstrata*, President MacDonald said the criteria prescribed by the EP Act relate only to the activities that may be authorised by the environmental authority, that is the mining activity.

[6] *Xstrata Coal Queensland Pty Ltd & Ors v Friends of the Earth – Brisbane Co-op Ltd & Ors and Department of Environment and Resource Management* [2012] QLC 13, [576].
[7] *Xstrata Coal Queensland Pty Ltd & Ors v Friends of the Earth – Brisbane Co-op Ltd & Ors and Department of Environment and Resource Management* [2012] QLC 13, [582]–[584].

Consistent with her interpretation of s 269(4)(j) of the MRA, that meant the impacts of scope 3 emissions could not be considered.[8]

You might be wondering where the *Maybe* is in that reasoning. Well there was none in her Honour's. However, since then a contrary view has been expressed. The Court of Appeal considered it in *Coast and Country v Smith* because Member Smith had adopted President MacDonald's reasoning at first instance.

On appeal, President McMurdo said President MacDonald's interpretation was open, but considered the better view was that the Court must consider scope 3 emissions in hearing objections to an environmental authority. She drew a distinction between the wordings of different criteria. Some included phrases like "for the application". She accepted such wording limited the criterion to the mining activity. However, there was not then and there still is no such limitation in the reference to the standard criteria.

Justice Fraser noted that Member Smith had adopted President MacDonald's interpretation and that Justice Douglas on judicial review had affirmed that. However, he did not directly adopt President MacDonald's reasoning. He dealt with a different argument – whether s 223 required the Court to take into account, adversely to Hancock Coal, the environmental harm that would be caused by the transportation and burning of coal. He said it was for the Land Court to decide what, if any, weight to give to the matters addressed under the criteria.[9]

What he did not say is that the Court could NOT take it into account. The Court of Appeal noted the answer would be the same if it could take scope 3 emissions into account. Given Member Smith's factual findings, scope 3 emissions were not a reason to recommend against granting the approvals. Those findings were open on the evidence and not amenable to judicial review.

Recently, Justice Bowskill considered the Court of Appeal's judgment, for a different purpose, in *New Acland Coal v Smith*.[10] She said Justice Fraser did not express a concluded view on the matter.[11]

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[8] *Xstrata Coal Queensland Pty Ltd & Ors v Friends of the Earth – Brisbane Co-op Ltd & Ors and Department of Environment and Resource Management* [2012] QLC 13, [597].
[9] *Coast and Country Association of Qld v Smith & Ors* [2016] QCA 242, [46].
[10] *New Acland Coal v Smith* [2018] QSC 88.
[11] *New Acland Coal v Smith* [2018] QSC 88, [71].

Referring to President McMurdo's reasoning, she said the absence of limiting words did not mean the standard criteria are considered at large. The hearing must still relate to the application for an environmental authority to carry out particular activities. However, she opined that, just as under s 269(4)(k) of the MRA, "broader considerations may be appropriate in considering "the public interest" as a component of the standard criteria.[12]

So there is our maybe. Whether it relates to all the standard criteria, as President McMurdo appears to suggest, or the public interest factor in the definition of standard criteria as Justice Bowskill said, it seems there is still some room to argue the Court must take into account scope 3 emissions when dealing with an objection to an environmental authority.

This point may be argued before the Court, so I will not express a view on the various interpretations I have canvassed.

In closing on the law then. The Court:

- can consider scope 1 & 2 emissions whether dealing with an objection to a mining lease or an environmental authority;
- can consider scope 3 emissions when dealing with an objection to a mining lease, but only as a matter of public interest or as a good reason to refuse the application; and
- may be able to consider scope 3 emissions when dealing with an objection to an environmental authority, either under the standard criteria as a whole or the public interest component of the standard criteria.

What are the key factual findings about GHG emissions?

Let me turn to the factual findings now. Earlier, I referred to the judgments in the Court of Appeal in *Coast & Country v Smith*. That judgment demonstrates how critical the expert evidence is in dealing with climate change objections.

I will stick with scope 3 emissions here as well, as that is the topic in contest. As far as I can find, no mining applicant in Queensland has ever disputed the science of climate change or denied their activities will contribute to climate change resulting in increased global temperatures and increased ocean acidification.

[12] *New Acland Coal v Smith* [2018] QSC 88, [73].

However, they have always challenged:

- how significant the GHG emissions are in a national and international context; and
- the causal link between emissions from the project and any precise or separate environmental harm.

I am not going to say any more about the second topic. It raises a legal argument which President MacDonald addressed in the alternative in *Xstrata*, but I am not convinced it is relevant to the law as it is currently being applied.

The Court has considered scope 3 emissions as a matter of public interest when hearing objections to the Wandoan, Alpha, Carmichael and stage 3 Acland applications. Each time, the Court decided the public right and interest would not be prejudiced by stage 3 emissions associated with the mine when weighed with other considerations, including economic ones.

Each time, the decision on public interest rested on factual findings about the projected global GHG emissions if the mine did not proceed. The Court accepted expert evidence that, if the proposed mine did not supply the coal, another mine, possibly with lower coal quality and higher GHG emissions, would meet the demand. The public interest would not be prejudiced if the mine proceeded and might be prejudiced if it did not.

The Court cannot act against the weight of the evidence. In climate change objections, the expert evidence is critical. I will take you to some of the evidence in a couple of cases and want to be clear about why I am doing so. I do not intend to criticise the experts, their evidence or what the Court made of the evidence. I am using some limited passages of their evidence to make a point about expert evidence on such a complex topic. By and large, the evidence I am referring to is evidence about the economics of coal markets.

I think about an expert's opinion as an iceberg. The ultimate opinion presents as a conclusion, at the tip of the iceberg. So in the cases I have referred to, the tip of the iceberg is the conclusion that refusing the mine will not result in a reduction in the level of global GHG emissions. But the strength of the iceberg lies beneath the surface. So let's dive down a bit.

In 2012, in *Xstrata* (the case involving objections to the Wandoan mine) President MacDonald relied on the evidence of experts on the economics of coal markets. They said there will be no impact on global demand for coal because that demand will be satisfied from another

source. The judgment does not reveal the foundation for that agreement, I presume because it was not in contest.[13]

In 2013, when Member Smith heard objections to the Alpha mine, the joint expert report of three expert witnesses, included this statement:[14]

"The amount of coal combusted in the world, including for the purpose of generating electricity will be determined by demand rather than restrictions on supply, *at least under the current global policy settings*."

In 2015, when President MacDonald heard the objections to the Carmichael mine there was a dispute between the economists about whether the market for coal was driven by demand or by supply.[15] That appeared to be a dispute about economic theory.

However, there is also a relevant rider in the opinion of the expert who described the market as demand driven. In summary, President MacDonald said his evidence was that the supply of coal is governed by global demand that will not change as a result of the commissioning of the Carmichael mine. He said that, *other things being equal*, if the coal is not supplied by the Carmichael mine, it will come from elsewhere. Global reserves of coal are very substantial.

Similar evidence was accepted by Member Smith when hearing objections to stage 3 of the Acland mine in 2016/7. He said it was *identical* to that in *Hancock* and drew the same conclusion on public interest.[16]

There was, however, some disagreement in the joint report of the coal market experts. That related to the extent to which coal would remain a component of the global energy mix during the life of the project. One thought coal would remain a *vital component, the other did not put it that highly*. [17]

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[13] *Xstrata Coal Queensland Pty Ltd & Ors v Friends of the Earth – Brisbane Co-op Ltd & Ors and Department of Environment and Resource Management* [2012] QLC 13, [559].
[14] *Hancock Coal Pty Ltd v Kelly & Ors and Department of Environment and Heritage Protection (No. 4)* [2014] QLC 12, [224].
[15] *Adani Mining Pty Ltd v Land Services of Coast and Country Inc & Ors* [2015] QLC 48, [448].
[16] *New Acland Coal Pty Ltd v Ashman & Ors and Chief Executive, Department of Environment and Heritage Protection (No. 4)* [2017] QLC 24, [9].
[17] *New Acland Coal Pty Ltd v Ashman & Ors and Chief Executive, Department of Environment and Heritage Protection (No. 4)* [2017] QLC 24, [1086].

What does not appear from the judgment and, therefore presumably from the joint report or their evidence, is the consequence of that difference of opinion. It is not clear whether they might want to revisit their assumptions about demand for coal and its use for power generation.

I want to explore two features of the evidence of a demand-driven market.

The first feature is the concern that some have raised about using an economic analysis to answer a broader question. I have heard this described as the drug dealer argument. If we don't supply it someone else will, but does that make it right? Opponents of the rationale raise questions that are more philosophical or ideological than legal or even economic issues. Does it matter that another mine might supply the coal? What about Australia's commitments to work in an international alliance to reduce global GHG emissions? Is it enough to worry only about Australia's scope 1 & 2 emissions? Should we also worry about how our export of coal might contribute to such emissions in other countries? Should we only export to countries that are signatories to the latest international climate change agreements? Should Australia lead by example, as we did with removing tariffs on imports? I am not sure the Court is the best forum to resolve these dilemmas. These seem to fall within the political domain. Certainly, I will not attempt to answer any of them tonight.

The second feature of the evidence about a demand driven market takes me back to my iceberg. The ultimate opinion is at its tip, but its strength, reliability, integrity, and durability lies beneath the surface. What facts has the expert relied upon? What assumptions has the expert made? How sound are those assumptions? Are those assumptions within that expert's own field of expertise? Has the expert relied on instructions or adopted assumptions made by another expert? And in a case involving a mine with a life of 30 to 50 years, how long can those assumptions be assumed to hold true? How confident can the Court be in accepting that the expert's assumptions provide a reasonable basis for an opinion that presents as a complete and simple answer to a critical and complex question?

In the Alpha mine case, how would the expert's opinion change if the "current global policy settings" changed? The economists did address that to some extent. They said this:[18]

[18] *Hancock Coal Pty Ltd v Kelly & Ors and Department of Environment and Heritage Protection (No. 4)* [2014] QLC 12, [224].

"under current global policy settings, while the share of coal in the fuel mix for electricity generation will most likely decrease in the future as the relative cost of renewables declines, the absolute volume of coal burned may still increase due to increased power consumption mainly in emerging economies. Material increases in the cost of coal as a fuel, such as may occur through a widespread application of a price on carbon, could change this equation."

What they did not address is how likely it is the current global policy settings will shift and what implications that has for their analysis.

In the Carmichael case what are the "other things being equal" that supported the demand-driven assessment by that expert? Without reading the expert's report and the transcript of his evidence, I cannot say what those other things are. Nor can I say how likely it is that those other things would remain equal.

There was some evidence from other experts that might be relevant. President MacDonald said the climate change experts said this:[19]

"current international pledges to reduce emissions are insufficient to achieve the stated goal of limiting warming to 2 degrees C. It may be that national and international policies are adjusted to endeavour to reach that stated goal. Any emissions associated with the mine could therefore be regulated under such policies. Approval of the mine could either be consistent or inconsistent with the goal of limiting warming to 2 degrees C depending on a range of external factors such as coal supply chain economics, whether there is a potential premature end of the project before its end of life time, and to what degree carbon sequestration and storage is used when burning the coal."

It is not clear whether that evidence was put to the economists or, if it was, what they made of it.

Now let me repeat my disclaimer. I am not criticising the expert evidence. I am not questioning how the parties conducted their case. I am not suggesting the Court should have drawn a different conclusion in any of those cases.

[19] *Adani Mining Pty Ltd v Land Services of Coast and Country Inc & Ors* [2015] QLC 48, [435].

The Court can only act consistently with the weight of the evidence. In the only appellate consideration of the Court's approach, Member Smith's findings were accepted as being open on the evidence before him.

So, I am not discussing the evidence to be critical. I have taken you to these passages to demonstrate a point of concern to any judicial officer asked to rely on expert evidence. What are the fundamental assumptions underlying the opinion? More often than not, this is where the real contest lies between experts in any field. It is also the point at which an expert's opinion may rest on matters outside their area of expertise or depend on assumed, not proven, facts. Of course, experts in most disciplines will have to make some assumptions in expressing an opinion in the context of a dispute. But, it is certain they will have to do so if they are predicting what may or may not happen in coal markets over 3 to 5 decades.

A myriad of circumstances affects markets and experience shows the market is not a perfectly rational beast. Untrained as I am in economics, there are still many factors that spring to my mind immediately:

- the extent of the coal reserves
- the viability of extracting the coal
- how that viability is itself affected by other circumstances
- sources of supply and their viability
- the variability in price (what was uneconomic or marginal at a coal price of under $60 a tonne is much more viable at $117 a tonne)
- efficiencies in production making marginal mines more viable
- technological advances making deeper deposits more attractive
- the sovereign risks in developing them, including approval processes, time involved, corruption, stability of the government.

And, importantly from a climate change perspective when considering demand for coal:

- advances in the technology for producing, distributing and storing energy generated from renewable sources
- the speed of transition to a non-carbon fuel economy, particularly in developing countries where the demand for electricity is increasing

- decisions made by developing countries about how to meet increasing demand for electricity
- the policy framework in which those decisions are made
- the source of support by developed nations for new demand in developing countries to be met by non-carbon power sources.

This is a fast evolving landscape. Expecting an economist to make accurate predictions about market conditions affected by such variables, decades into the future, is a big ask.

There has been a significant change in global policy settings since the Carmichael mine hearing. The Paris Agreement came into force in 2016. It includes a global goal to hold average temperature increase to well below 2°C and pursue efforts to keep warming below 1.5°C above pre-industrial levels. Of course, that is an aspiration. Yet it is one that will influence decisions made by nations and corporations. Further, the Paris Agreement shows increasing focus on implementation and response to global performance. Another commitment is that all countries must set mitigation targets from 2020 and review targets every 5 years to build ambition over time, informed by a global stocktake. Much has been written about the principles of progression and non-regression in the Paris Agreement and I do not need to canvass them tonight. I do perceive, though, that these may result in different global policy settings in an economic analysis.

Power generation from renewal energy sources has become more viable and cost-effective, some would say remarkably so. However, reliability of supply in a distribution network presents difficult ongoing challenges that might prevent renewable energy replacing coal for some time in the future.

There has been a sharp increase in the price of coal. What impact might that have on decisions about power generation?

These seem to me to be some relevant factors in assessing international coal markets. The experts who gave evidence in previous cases in the Court appear to have suggested as much.

The difficulty for the parties, the experts and for the Court is how to identify and grapple with these underlying factors. I can say, without hesitation, that the worst outcome will be if the first time an expert is asked to address those underlying factors is when they step into the

witness box. These are complex matters and may require further investigation and thoughtful reflection.

You might be aware that I recently issued a practice direction about Court Managed Expert Evidence.[20] I am not going to explain that process in any depth. It builds upon the familiar expert conferencing process. A Member or Judicial Registrar, as a CMEE Convenor, will work with the parties and their lawyers in without prejudice case management conferences to identify issues for the experts and to manage instructions to and communications with the experts. The Convenor will also oversee the meetings of experts and facilitate their joint reports.

This is the procedure the Court will use to avoid that worst outcome occurring. In an objections hearing raising climate change issues, you can expect the case will be subject to CMEE. You can also expect that the CMEE Convenor will be ensuring that the experts examine and address each other's opinions, not just at the tip, as is so often the case with joint reports, but also under the surface. If there is a fundamental flaw that might calve off a smaller iceberg, let's identify that early. If not, let's make sure it is clear for the Court, and for the ultimate decision maker, what assumptions have been relied upon in considering the public interest.

[20] Land Court of Queensland, *Practice Direction 3 of 2018*—Procedure for Court Managed Expert Evidence, 30 April 2018.