Environmental Evaluation of Development Proposals
Case Study: the Adani Project ~ A Need for Review?

Scientific Uncertainty, the Politicization of Science and Public Interest Environmental Conflicts

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"Uncertainty is not the hallmark of bad science. It is the hallmark of honest science. No politician should determine a serious public policy on the basis that the science underlying the discussion is uncertain."

George Brown Jnr, Democrat, California, 104th United States Congress, 1997

Introduction

The Adani coal mine project ignited significant controversy over the nine years of planning, public participation and evaluation undertaken before approval was finally granted by the Queensland Government in June 2019.

One issue that emerged was that the politicization of science became an issue of concern for the public interest environmental conflict created by the Adani project.

This concern was directed at both the Queensland Labor State Government and the Federal Liberal National Party Government; approval for the Adani project was required from both levels of Government.

Clearly, the politicization of science cannot be dismissed in any review of the evaluation and approval processes for the Adani project. Part of the challenge of a review is for Government is to find a problem-solving pathway to avoid history repeating for this issue.
In this regard, this article provides a problem-solving pathway that focusses on two elements to address this challenge: -

*Understanding why public interest environmental conflicts, like the Adani project, ignite controversy that can lead to politicization.*

*And an understanding of what politicization of science means - how it arises and how it may be offset.*

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**Public Interest Environmental Conflicts: A Source of Politicization**

It should be recognized that a feature of public interest environmental conflicts, like the Adani project, is that they involve multiple competing interests – community, cultural, development, environment ... – for the use of natural resources. The position each interest group holds on disputed scientific issues may result in politicization by any group – in addition to Government!

The first stage of the evaluation of the Adani project, the preparation of an EIS (“Environmental Impact Statement”), can be a source of controversy that can lead to the politicization of science following community consultation.

Following the completion and publication of the Adani EIS, the Queensland Government initiated a community consultation process seeking comment and submissions from the community on the Adani project.

*However, the views expressed in the submissions received from community consultation are not binding on Government in decision-making at the project approval stage.*

**The reason:** unless there is a statutory requirement for Government to be bound by the outcome of the consultation, *there is no legal basis for the advice received during community consultation to be accepted or taken into account to any particular degree in decision-making by Government*.¹

*A statutory obligation to consult is an obligation to consult, not an obligation to agree — unless such power is provided for in the statute.*
However, such a legal obligation is generally not provided for in environmental legislation in Australia e.g. Queensland’s *Environmental Protection Act (1994)* and the Federal *Environment Protection and Biodiversity Conservation Act (1999)* only provide for an obligation to consult.

The pathway taken by the Queensland Government to review disputed scientific issues *at a later stage of the evaluation* of the Adani project was to rely on constituting *panels of independent scientific experts* on an ad hoc basis. *Lawyer-led Royal Commissions or Commissions of Inquiry* are also pathways used in Australia for controversial environmental conflicts.

But these pathways may also trigger public controversy if not seen as an open and transparent process. The reason: -

*The findings and conclusions arising from all these pathways are not binding on Government – but merely recommendations.*

It would be rare for Government to implement all of the recommendations "lock, stock and barrel" arising from Commissions of Inquiry; as was the case of Queensland’s then Premier, Mike Ahern, following the “Police Corruption” Commission of Inquiry of Tony Fitzgerald QC. An option used by Government is to “cherry pick” selected recommendations.

**Comment:**

1.0 Where the outcomes from community consultation sought by competing interests involved in the public interest environmental conflict - or through the review of disputed scientific issues by independent experts - do not resolve the underlying sources of conflict, these sources remain a source of resentment or irritation. Consequently, these sources of conflict may re-emerge at a later date to act as a trigger for the politicization of science by competing interests - or litigation.

2.0 Where competing interests involved in the public interest environmental conflict hold rigid non-negotiable positions on the use of natural resources, politicization of science can be ignited through the exercise of the sources of power that are available to each interest group, such as: *resource power (e.g. financial), knowledge power (e.g. scientific expertise in the conflict) or associational power (e.g. through association with influential people or organizations).*
3.0 It needs to be recognized that politicization of science is not the exclusive domain of Government. It may also be the province of competing interest groups for the use of natural resources in public interest environmental conflicts.

What Does Politicization Mean? How Does it Arise?

**Politcization of science means**

*that the interpretation of scientific information is shaped for political gain in a way that distorts its true meaning.*

Contrary to a long-held misconception, science does not generate exact knowledge with logical certainty. Any inherent uncertainty in the available scientific information in a public interest environmental dispute that creates an *information conflict* can act as the trigger for the politicization of science.

Information conflicts arise, not only from an information or database that is incomplete or unavailable – but also because of:

- *Different interpretations of the same information base; or*
- *Different opinions as to what information is “the best available science”.*

*Both these factors will predominate when the environmental evaluation process relied on by Government is “silco science”.*

*That is, by limiting the effective interaction between scientific experts of competing interests in a public interest environmental conflict enabling them to be meaningfully involved with Government in resolving information conflicts.*

The aim of politicization is to create doubt that widespread scientific consensus exists: Widespread consensus within the scientific community - following peer review and publication - is one enduring test for the acceptance of scientific findings.

Where widespread scientific consensus is in dispute, divergent expert scientific opinion will emerge to support the particular position and agenda of competing interests for the use of natural resources in public interest environmental conflicts: The scene is then set for science to become politicized.
Comment:

Government and competing interest groups involved in a public interest environmental conflict need to ensure trust and public confidence in the environmental evaluation and approval process is paramount: By ensuring that there is no basis to conclude that their own judgement has been substituted for that of the scientific community.

Conclusions: How to Offset Politicization

"The idea that politicians rather than scientists should decide what constitutes ‘sound science’ should deeply disturb all those concerned with the integrity of the scientific process”.


1.0 The existing “silo science” approach needs to be replaced by a collaborative joint fact-finding approach that meaningfully involves the scientific experts of Government and competing natural resource interest groups in the process for resolving information conflicts e.g. The Scientific Roundtable.

2.0 A common database of the relevant and reliable science agreed to by the scientific experts to address the factual issues in dispute must be derived by a data mediation at the outset.

3.0 There is a need to insist that the evaluation of disputed scientific issues and divergent scientific opinion should be based on shared responsibility and joint action by the scientific experts using objective criteria based on the standards and criteria of science: Testability, objectivity and impartiality.

For example, by the application of the United States Supreme Court principles for "relevant and reliable scientific evidence\(^2\)" in Daubert v Merrell Dow Pharmaceuticals Inc. 509 U.S. 579 (1993).
The Land & Environment Court of New South Wales considered the meaning of the legal obligations for community consultation as imposed by the relevant environmental statute:

“Given its ordinary or common meaning, according to the Oxford Dictionary, consultation involves the taking of counsel, seeking information or advice from another and taking it into consideration either by deliberation or in conference. There is no imperative that the advice be accepted or that it be taken into account to any particular degree. The object of consultation is to be apprised or informed of other opinions or positions in regard to a subject before the matter for decision is finally determined”.

The Appeal Court of the Supreme Court of New South Wales (1995) 87 LGERA 78, concluded: “…The obligation was to consult, not to agree”.

The United States Supreme Court concluded that in relation to “whether the testimony’s underlying reasoning or methodology is scientifically valid and properly can be applied to the facts at issue [that] many considerations will bear on the inquiry” - including:

1. “Whether the theory or technique in question can be (and has been) tested;
2. Whether it has been subjected to peer review and publication;
3. Its known or potential error rate; and
4. The existence and maintenance of standards controlling its operation, and whether it has attracted widespread acceptance within a relevant scientific community.

The inquiry is a flexible one, and its focus must be solely on principles and methodology, not on the conclusions that they generate.”