

The Paris Agreement, Energy Policy, Divergent Scientific Opinion & Transitioning to a Low Carbon Future: The Scientific Round-Table & Information Conflicts

Dr Ted Christie, 17 February 2017



Disclosure Statement

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*The **Scientific Round-Table** is a structured process for evaluating and resolving divergent viewpoints on scientific and technical issues in environmental conflicts, based on “**relevant and reliable**” evidence? It has been developed and used by the author for conflict management; where conflict resolution is undertaken, external to and independent of the courts.*

*Principles and concepts from **conflict management, alternative dispute resolution** and **environmental justice** provide the framework for the problem-solving approach that is outlined.*

*This article sets out how **conflict management**, based on the **scientific round-table**, can resolve conflicts over scientific evidence on energy policy, when transitioning to a low carbon future.*

***Conflict management** is a pre-requisite for the final stage: Achieving equitable negotiated outcomes through **conflict resolution**.*

Understanding Information Conflicts

Information conflicts are triggered by **divergent scientific opinion**. Public debate becomes polarised.

Information conflicts *arise because of a lack of information, misinformation, scientific uncertainty, different interpretations of the same information or different opinions as to what information is relevant.*

The absence of a generally accepted research methodology – or a standard protocol - that provides the framework for a research investigation adds a further element to information conflicts.

The pathway for Australia to transition to a low carbon future within the required “*Nationally Determined Contribution*” time frames of the Paris Agreement, has led to polarised scientific, political and public opinion between the future for fossil fuels and renewables.

Uncertainty for energy policy has been the result. For example, controversy over key issues such as:

- The need for uniform, national, objective criteria to facilitate decision-making by Government in determining prescribed “*Renewable Energy Targets*”;
- Whether a large-scale electricity generation system, based on a 100% mix of different types of renewable sources of energy, can replace a conventional fossil fuel electricity generating systems - and be just as reliable?
- Whether some renewable energy sources can supply baseload power that replicates baseload of fossil-fuelled power stations, such as coal and gas - power stations designed to run continuously whether, or not, their power is needed?
- The most effective mix of energy sources to meet *Emission Reduction Targets* in “*Nationally Determined Contributions*” for power generation and for achieving energy security?
- *Cost-competitiveness* of fossil fuel power generation compared to renewable power, for the time periods set by the Paris Agreement to reduce carbon emissions?
- Potential of clean coal technologies e.g. “*High Efficiency, Low Emissions*” coal-fired power stations and “*Carbon Capture, Use and Storage*” for reducing carbon emissions - in terms of both scale, and carbon emission reduction targets within the “*Nationally Determined Contribution*” time frames?
- Potential of geothermal energy, as a renewable energy source, to operate 24 hours a day, and to provide critical large scale baseload power? The status of current geothermal projects in Australia e.g. *proof-of-concept, early demonstration stage...?*

The Objectives of the Scientific Round-Table

The **first objective** requires a full and fair disclosure of all relevant and reliable scientific and technical information for the issues in conflict - known to be published – to be made available through information exchange. This is a pre-condition before commencing the second objective.

The rationale for this objective is to ensure that a joint fact-finding process can proceed without any fear of “*cards being held under the table*”!

Where conflict resolution is undertaken independently of legal action, there will be no formal process of “**Discovery**” – as is the case for litigation. Information exchange between all parties in legal proceedings is under strict judicial control. The trial commences after all Discovery is completed.

The absence of a formal Discovery process is a limitation for conflict resolution when undertaken independently of a legal action.

But, it can be offset by relying on conflict management and the process of ***data (or information) mediation***.

The **second objective** is for the scientific experts to reach agreement, by consensus, on disputed scientific issues based on **relevant & reliable evidence**.

Key Elements of the Scientific Round-Table

The scientific round-table is convened by an independent dispute resolver having scientific expertise in the subject matter of the conflict - as well as having alternative dispute resolution process skills.

(i) Representation at the Round-Table: “*The Scientific Panel*”

The representatives at the scientific round-table, apart from the dispute resolver, are a panel of scientific professionals, having demonstrated expertise in the key issues identified for Australia’s energy policy.

For a scientific round-table to address the challenge of developing an **energy policy for Australia** in transitioning to a low carbon future, scientific experts would be nominated by stakeholders holding competing energy interests to be their representative at the round-table. There are three broad categories for representation: **“Economic”, “Special (*other than Economic*)” and “Community” Interests.**

Ideally, there should be **balanced representation** between these three categories in the scientific panel.

(ii) Data Mediation at the Round-Table

The dispute resolver and the scientific panel all have a role in identifying information that needs to be the subject of information exchange. Key issues for energy policy, identified and ranked in order of priority, are the relevant materials that become the subject of information exchange.

Relevant materials may be identified by each scientific panel member. The dispute resolver may also identify materials to complement the list compiled by the scientific panel.

A list of scientific materials *e.g. published articles, reports, experimental studies*, is compiled to address the key issues for energy policy. The final list of materials becomes the common database used in the next step – collaborative joint fact-finding at the scientific round-table.

(iii) Fact-finding at the Round-Table

The goal of the scientific panel is to reach agreement for each scientific issue in dispute on energy policy - based on the information database arising from the data mediation.

The scientific round-table adopts a **joint fact-finding approach** for evaluating the scientific issues in dispute.

Joint fact-finding at the scientific round-table overcomes the obstacle of polarised scientific opinion arising in the adversarial process and litigation.

To avoid information conflicts arising from different interpretations of the information database, the scientific round-table must adopt an underlying element of **principled negotiation**: *The evaluation of disputed issues on energy policy must be based on objective criteria agreed to by the scientific panel.*

The Scientific Round-Table: Role of the Representatives

As the round-table is structured as a joint fact-finding exercise, the scientific panel members cooperatively interact with one another in conferring - or challenging differing perspectives held - on disputed issues. The dispute resolver may also question the scientific panel.

Where consensus cannot be reached on any issue, the dispute resolver may provide a non-binding opinion to the scientific panel - subject to one qualification: *This opinion is used to facilitate the scientific panel to reach consensus on the disputed issue in question.*

The Role of the Dispute Resolver: Independent Expert Appraisal

The scientific round-table is based on the alternative dispute resolution (“ADR”) process of “Independent Expert Appraisal”.

- *Independent expert appraisal is an **advisory ADR process**.*
- *Where there is an impasse on any disputed issue between the scientific panel at the round-table, the dispute resolver may evaluate the disputed issue and provide a non-binding opinion, or non-judgemental advice, to the scientific panel how they might resolve the issue e.g. options for the scientific panel to consider to reach a compromise;*
- *The framework for the dispute resolver’s non-binding opinion is the information database provided from the data mediation; and*

- *If appropriate, this information may be complemented by additional research undertaken by the dispute resolver.*

Conclusions: Conflict Resolution following the Scientific Round-Table

Conflict resolution does not commence until the conflict management stage has been completed. To facilitate conflict resolution, a “**Summary of Outcomes**” arising from the joint fact-finding process of the scientific round-table is prepared by the dispute resolver.

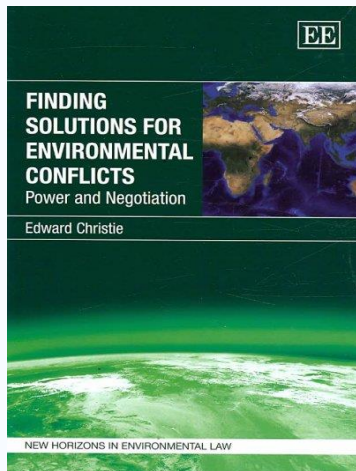
The summary of outcomes would include:

- (i) The disputed issues where the scientific panel had reached agreement. *The underlying reasoning for reaching agreement must be scientifically valid and can properly be applied to the disputed facts at issue.***
- (ii) Where agreement could not be reached by the scientific panel on a disputed issue, the non-binding opinion of the dispute resolver would be provided¹.**
- (iii) The summary of outcomes from the scientific round-table becomes the foundation for the final stage - conflict resolution – to proceed. The representatives involved in conflict resolution would be political leaders engaged in energy policy. *These outcomes ensures there is an adequate basis of knowledge power for effectively participation in conflict resolution.***

☑ Resolving information conflicts over energy policy through the use of the scientific round-table, is the catalyst for achieving **meaningful involvement** of competing energy interests in conflict resolution.

☑ The summary of outcomes would also facilitate reaching a negotiated outcome that reflected **fair treatment**: That is, one that minimized the extent to which environmental costs and benefits were shared disproportionately between Government, industry and the community.

☑ Environmental justice will prevail if these goals are achieved.



This article is based on Chapter 10 (“*Managing and resolving environmental conflicts by negotiation: NIMBY or NIMBI*”) of the Author’s book, “[Finding Solutions for Environmental Conflicts: Power and Negotiation](#)”

END NOTE

¹ Read more on the role of the Scientific Round Table where there is incomplete or unavailable information and the [options that could be taken to facilitate decision-making](#).