Action for Climate Change and the Paris Agreement:
Moving Forward After Australia's Federal Election (18 May 2019) ~ Charting a Pathway from Community Division to Consensus

Dr Ted Christie, *24 May 2019*

TAGS: *Paris Agreement; climate policy; emission reduction targets; unintended outcomes; level playing field; information conflicts; sustainable development; equity; CBDR principle; mitigation measures; adoption; science; innovations*

Disclosure Statement

Ted Christie does not work for, consult to, own shares in or receive funding from any company or organisation that would benefit from this article, and has no relevant affiliations

OUTLINE

One political perspective of the recent Federal election campaign was a focus on climate change as a key issue for deciding the election outcome: The climate crisis was seen as the significant challenge of our generation.

In turn, the election enabled Australians to vote on a climate policy that best addressed their 'needs and concerns' (or "interests") e.g. by making their vote based on the extent that the emission reduction target and measures defined in a policy would lead to substantive action on climate change.

Support for climate change as a critical issue for the election outcome was reflected in polls and surveys undertaken prior to the election.

For example, polling in Australia by the Essential Report found that 53% of those surveyed thought Australia was not doing enough to address climate change, compared to 24% who thought Australia was doing enough.

Also, 69% of Australians thought it was important for the Federal Government to agree to a policy to address climate change by reducing carbon emissions – compared to 23% who thought it unimportant.

But action for climate change did not prove to be as crucial an issue, as previously thought, to shape the outcome of the Federal election.

Instead, the differences in the emission reduction targets in the climate change policies of Australia's three major political parties - the Liberal National Party Coalition ("LNP"), Labor and the Australian Greens ("The Greens") - have led to a "log-in-the road". The community division over action on climate change persists.

The challenge, now, is to move forward, away from the community division over action for climate change. The aim should be to achieve the goal of consensus on action for climate change for Australia.

From a conflict resolution perspective, the generally accepted meaning for consensus is reaching a decision that all parties can live and abide with. Consensus does not mean total agreement on every part of a decision, but all parties must be willing to accept the overall decision. Consensual agreement is the alternative to a unanimous agreement.

A problem-solving framework to address the challenge of achieving consensus on action for climate change would have a number of cornerstones, including:

- ☑ ***Recognizing that action for climate change is a classic sustainable development issue, involving the balancing of environmental, economic, social and cultural objectives, equitably; and not weighted in favour of one objective only e.g. environmental ("emission reductions").***

  Being aware that unintended outcomes may arise if action for climate change is not undertaken within a sustainable development framework.

- ☑ ***For UN Parties that have ratified the Paris Agreement, taking action for climate change requires an understanding of the legal obligations imposed by Paris, and their applications, for decision-making.***

  Specifically, the principle of common but differentiated responsibilities ("CBDR"), equity and sustainable development: These obligations are interdependent **and** ***mutually supporting and so provide the foundation for action for climate change under Paris.***

- ☑ ***Information conflicts predominate in any environmental conflict and will almost certainly be problematic in the information available for climate change policies. Information conflicts need to be effectively managed and resolved using a range of strategies: -***

  By giving effect to accepted principles from the social sciences knowledge base for "effective public participation"; the "diffusion" (spread) and "adoption" (acceptance) of mitigation and adaptation measures; and the "management and resolution of conflict".

Effective implementation of the Paris Agreement obligations
must be in the context of sustainable development
and to reflect equity and the CBDR principle,
when setting emissions reduction targets
and guiding climate policy decision making
for the appropriate mix of mitigation and adaptation measures.
Effective implementation would enable a pathway
for achieving real action for climate change to be charted
as well achieving a level playing field
for all UN parties to the Paris Agreement.

The Kyoto Protocol came into force in February 2005.

If climate change action taken in Australia had applied the Kyoto obligation "to promote sustainable development" when implementing policies and measures to reduce emissions, rather than placing an inordinate focus on emission reduction targets, it would not have taken over a decade to identify the unintended consequences[1] that subsequently arose. Such as the reliability and affordability of power supply and their impacts on the community, business and industry e.g. energy prices and investment decisions.

Introduction

There were significant differences in the policies released for the Federal election for taking action for climate change between Australia's three major political parties, the Liberal National Party Coalition (the "LNP"), Labor and the Australian Greens ("The Greens"). Differences that polarised public opinion, and ignited division within the community.

These policy differences need to be resolved
to enable Australia to maintain its
trustworthiness, prestige, influence and international reputation,
at the global level,
by complying with the UNs climate change treaties.

The following differences in emission reduction targets were at the core of the climate policy information conflict: -

- *The LNP action for climate change policy sought to meet a global emissions target of 26% to 28% below 2005 levels by 2030.*
- *Labor was committed to reducing Australia's pollution by 45% on 2005 levels by 2030 and net zero pollution by 2050.*
- *The Greens wanted net zero or net negative Australian GHG emissions by no later than 2040.*

However, transitioning to a low or zero carbon economy - from resources to renewables or other energy sources - should enhance the implementation and strengthening of the global response to the threat of climate change *within the framework of Paris obligations; and not lead to any unintended outcomes.*

Paris Agreement Obligations & Applications for Decision-Making

Sustainable development, equity and the CBDR principle
are inter-dependent
and mutually supporting obligations
for taking a balanced approach for climate change action
and setting emission reduction targets under the Paris Agreement[2].

- ***Sustainable Development***

In 2015, the UN charted a new course for sustainable development[3]. A sustainable solution requires the multiple and competing objectives of sustainable development – *environmental, economic, social (including cultural)* - be assessed and balanced equitably.

- ***Environmental:*** *e.g. Effectiveness of the mix of mitigation and adaptation measures of Australia's emission reductions to meet the Paris temperature goals;*
- ***Economic:*** *e.g. Cost-competitiveness of the mix of mitigation and adaptation measures undertaken by Australia for reducing CO_2 emissions; and*
- ***Social (including Cultural):*** *e.g. Ensuring affordability and reliability to offset inequalities in access to energy.*

To assess and balance the multiple objectives ***equitably***
means that one objective would be not weighted in favour of the others.
The aim is not only
to meet the long-term temperature goals of the Paris Agreement,
but also to ensure that future risks
to people, economies and ecosystems,
from climate change, are effectively managed.

Following the *Rio Declaration on Environment and Development* in June 1992, Australia led the world by implementing an innovative national environmental policy in December 1992.

The policy set out the ***guiding principles for sustainable development*** and was drawn up and agreed to by all levels of Government in Australia – Federal, State, Territory and Local: The ***National Strategy for Ecologically Sustainable Development***.

Five of the National Strategy's seven 'Guiding Principles'
provide the framework for evaluating
action for climate change and
emission reduction targets
in the context of sustainable development.

- ☑ Decision making processes should effectively integrate both long- and short-term economic, environmental, social and equity considerations;
- ☑ *The need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised;*
- ☑ The need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised;
- ☑ *The global dimension of environmental impacts of actions and policies should be recognised and considered; and*
- ☑ The need to deal cautiously with risk and irreversibility.

Comment:

(i) The action for climate change policies released by the LNP, Labor and the Greens for the 2019 election do not incorporate all of these guiding principles for sustainable development in their climate change policies.

(ii) The guiding principles for sustainable development represent the basis for evaluating climate change policies and measures that may resonate with "jobs and the environment" - and so move away from the past positional focus on "jobs or the environment."

- ***Equity***

The plain and legal meanings of ***'equity'*** are similar: ***"fairness", "justice"***.

The application of equity,
as a fair treatment guideline
for achieving sustainable outcomes,
means that no consumer, business or industry in Australia should
bear a disproportionate share of the negative consequences resulting
from mitigation and adaptation measures
implemented to achieve emission reduction targets.

Comment:

The Greens were the only political party to refer to equity in their election 2019 action for climate change policy - but only as one of their Principles[4].

- ***The Principle of Common but Differentiated Responsibilities***

The CBDR principle, a long-held principle of international law, has two elements:

- ☑ *The common responsibility of nations to protect the environment, or parts of it, at the national, regional and global levels; and*
- ☑ *The need to take into account the different circumstances, particularly each nation's contribution to climate change and its ability to prevent, reduce and control the threat – in the light of different national circumstances.*

There are two considerations when applying the *CBDR principle*:

The cumulative responsibility of each country
for contributing to climate change
- *the historical as well as current responsibility –*
and the economic and technical capability of each country
to combat climate change.

Comment:

(i) A review of the action for climate change policies released for the Federal election in Australia in May 2019, reveals that the LNP, Labor and the Greens did not make any reference to the CBDR principle in their climate change policies.

(ii) Under the CBDR principle, each country has an obligation to share in the global responsibility for their contribution to historical cumulative CO_2 emissions over some defined baseline period e.g. pre-industrial to 2016 (the year the Paris Agreement came into force); as well as current/future responsibility.

(iii) Stage 1 is to address the historical contribution: To resonate with equity (fairness), this obligation would extend to require each country to offset their actual contribution to historic global temperature rise over an agreed baseline period. The reduction achieved by a country's emission reduction target – at the very least – should offset their contribution to historic global temperature rise. In such a case, a conclusion that their actions for climate change were equitable ("fair") would arise.

(iv) A level playing field would arise if each UN party met its responsibility to set emission reduction targets that effectively offset their contribution to historical global temperature rise over an agreed baseline period of time.

(v) The current/future responsibility for addressing global temperature rise arising from cumulative CO_2 emissions is the second stage to address; the approach for action for climate change shares common elements with the historical contribution.

(vi) CASE STUDY

The contributions to historic global temperature rise from fossil fuel and land-use CO_2 emissions and non-GHG emissions over the time period of 1800-2005 were estimated in a Canadian study published in 2014; the top 20 ranked countries contributed 0.7°C of the global warming over this period. Australia was ranked 19th and contributed 0.006°C.

Applying the CBDR principle and equity obligations to set an emission reduction target, would mean that Australia's responsibility would be to offset its less than 1% (0.86%) contribution to the historical global temperature rise over the period, in this case, 1800-2005.

Unintended Outcomes and Emission Reduction Targets

The Kyoto Protocol came into force in February 2005.
If climate change action taken in Australia
had applied the Kyoto obligation
to promote sustainable development
when implementing policies and measures to reduce emissions,
rather than placing
an inordinate focus on emission reduction targets,
it would not have taken over a decade
to identify the unintended consequences that subsequently arose:
Such as the reliability and affordability of power supply
and their impacts on the community, business and industry
e.g. energy prices and investment decisions.

Comment:

A climate policy approach that places an inordinate focus on emission reduction targets in the policy decision making process - without effective consideration of the Paris obligations - the CBDR principle, equity and sustainable development - makes achieving real action for climate change problematic!

Climate Policy Information Conflicts: Avoidance and Evaluation Strategies

Conflicts over climate science information
arise through a lack of information, misinformation,
scientific uncertainty,
different interpretations of the same information
or different opinions as to what information is relevant.
Adoption of experimental and research methods,
where there are no standard protocols,
intensifies information conflicts.

But there are a number steps a climate science policymaker can take to avoid or to resolve an information conflict, including: -

- ***Effective Public Participation and Climate Change Policies***

A key long-standing principle for effective public participation requires all relevant and reliable information to be made freely available to the public. This means that communities should be given adequate, readily intelligible information on which to make decisions i.e. in a form that can be understood and for "*no cards to be held under the table*".

A problem to avoid arose in the 2019 Federal election in Australia: A case of a political party failing to provide costings for their climate change policy.

- ***Diffusion and Adoption of Climate Policies & Mitigation Measures***

The diffusion ("spread") of scientific information in climate change policies does not simply end with the public release of the policy.

The more difficult challenge is whether the policy will be widely accepted by the community and adopted after the diffusion stage.

The challenge for the adoption of a climate change policy
is deciding
whether the climate policy emission reduction targets
and mitigation and adaptation measures
will be climate change-effective,
cost-effective,
sustainable,
and create a level playing field for Australia
in meeting the Paris Agreement's long-term temperature goals.

A problem-solving approach to address this challenge can be based on the "Roger's concepts"[5] from the social sciences: They have long been the benchmark for understanding and evaluating the diffusion and adoption of scientific innovations and ideas.

The "Rogers concepts" have been applied in the context of climate change science in the outline that follows: They include: -

- **RELATIVE ADVANTAGE:** *Does the emission reduction target have a clear advantage over competing targets, in terms of being climate change-effective and cost-effective? Expert opinion suggests that relative advantage is an essential condition absolutely necessary for adoption. The impact of costs (both direct and indirect) versus benefits is a relevant consideration as an innovation attribute for adoption.*

- **COMPATIBILITY:** *In transitioning to a low or zero carbon economy - from resources to renewables or other energy sources - a mix of mitigation or adaptation measures to achieve an emission reduction target that is compatible with intended industry and community values, norms, and perceived needs is more likely to be readily taken up and to have a significant impact on a decision to adopt.*

- **COMPLEXITY:** *Where the outcome of an emission reduction target is perceived as easy to understand it is more likely to be adopted.*

To be persuasive, policies on action for climate change need to translate outcomes using language and experiences of everyday life. For example: By reporting outcomes in terms of the effectiveness of emission reductions to offset Australia's actual contribution to historic global temperature rise for a defined baseline period e.g. 1800-2016.

- **RISK:** *If there is a high degree of uncertainty in the outcome(s) of an emission reduction target or a mitigation or adaptation measure - or a perception of risk – adoption is less likely.*

- **REINVENTION:** *The ability to adapt, refine or modify a mitigation or adaptation measure to suit the specific use needs of industry and the community will allow it to be more easily adopted*.

- ***Management & Resolution of Climate Policy Information Conflicts***

One of the accepted principles for "***Principled Negotiation***" has a significant application for managing and resolving information conflicts over scientific data - in this case, climate science: *To insist that objective criteria be relied on to resolve conflicts over scientific information*.

The "Rogers concepts" fulfil the role of objective criteria to give effect to the application of this principle.

The "Rogers concepts"
should be seen as the source of objective criteria
to enable an objective assessment
of different climate change policies
and mitigation and adaptation measures,
in terms of their likelihood for "adoption".

END NOTES

[1] **The public debate over energy security was galvanized in Australia because of significant concern and uncertainty over the reliability and affordability of power supply and their impacts on the community, business and industry.**

In September 2016, a one-in-50-year storm, with tornado-like winds, swept through South Australia *plunging the entire State into darkness*; power returned to most of the capital city, Adelaide, in hours; for some regional areas, this took more than a day

In New South Wales, in *February 2017, because of load shedding events*, on a day where the State's heatwave caused electricity demands to soar to record highs; and in South Australia because of power cuts to 90,000 homes in, Adelaide, to protect a struggling power network.

Notwithstanding that, on the world scene, Australia is a major exporter of coal and CSG, a *comparative evaluation study posted in August 2017*, revealed that Australian residential customers were, at that time, paying some of the highest electricity prices in the world - two to three times more than American households.

[2] **Legal obligations in Article 2 of the Paris Agreement (*Version 22 October 2018*) include:**

Article 2.1: Enhancing the implementation and strengthening of the global response to the threat of climate change, *in the context of sustainable development* and efforts to eradicate poverty in achieving the long-term temperature goals, including by:

> **(a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels…**

Article 2.2: Implementation of the Agreement to reflect *equity* and the *principle of common but differentiated responsibilities* ("CBDR") and respective capabilities, in the light of different national circumstances.

[3] **The *UN's 2030 Agenda for Sustainable Development*, released in 2015,** has **"*Climate Action*" as one of its 17 interrelated goals (*Sustainable Development Goal 13*). This goal will be one of the inter-related goals to be reviewed in-depth at a high-level UN political forum in New York in July 2019.**

[4] **"Equity must be at the core of climate change negotiations and measures, and the transition to an economy that supports a safe climate."**

[5] **The book, "*Diffusion of Innovations"* by Professor Everett Rogers, first published in 1962 (and now in its 5th edition), is regarded as a classic work on understanding how, why, and at what rate new scientific ideas and innovations spread ("*diffusion*") and their uptake ("*adoption*").**

Following Rogers, Steven Kelly (2012) published an updated, detailed Research Report that reviewed the key criteria of Rogers because of their potential impact on the rate of adoption of innovations:

Literature Review on the Diffusion of Innovations and Best Practice for Technology Transfer