



Managing Risk when the stakes are **EXTREME**

Applying AS/NZS ISO 31000: Risk Management to highly emotive, high profile and highly uncertain issues such as Climate Change and the Carbon Tax

About RMIA

The Risk Management Institution of Australasia Limited (RMIA) is the largest professional association and peak body for risk management in the Asia-Pacific region. Members of RMIA cover every sector of the economy and all levels of government. RMIA's members are located predominantly in Australasia and there is a growing membership internationally.

The RMIA is a leader in professional education, providing recognition of core competencies, the provision of top class networking events and in driving thought leadership in the management of risk and realisation of opportunities. RMIA provides two accreditation designations for its members, including Certified Practising Risk Manager (CPRM) and Certified Risk Management Technician (CRMT).

Through its active participation in policy setting forums and the publishing of standards related to the risk management profession, the RMIA keeps members and other interested parties abreast of key industry developments as well as helping to ensure risk management guidance to organisations is pertinent and adds value.



About CPRMs

The CPRM (Certified Practising Risk Manager) designation, as with the CRMT (Certified Risk Management Technician), is an RMIA accreditation designed to provide confidence that our risk professionals have high levels of expertise and competency. These peer reviewed licences represent the highest levels of practice at two important stages of a Risk Manager's professional career. CPRM and CRMT members have demonstrated significant skills and knowledge gained through experience, qualification and a commitment to ongoing professional development.

Acknowledgements

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About the paper

From time to time, risk professionals are asked to provide advice when the stakes are as extreme as has been the case surrounding the debates on Climate Change and the Carbon Tax. So the RMIA asked a group of Certified Practising Risk Managers (CPRMs) to test the worth of AS/NZS ISO 31000: *Risk Management* in providing sound guidance to risk professionals to do just that.

The CPRM Masterclass was held at the RMIA National Conference in November 2011, ten months after the major floods in Queensland and Victoria, one month after the second release of the Murray Darling Basin Plan and just eight months before the Carbon Tax was due to commence. It had been a year where debate had raged across the country on all fronts.

The one-day Masterclass is traditionally a facilitated workshop with an emphasis on participation by the CPRMs to facilitate the sharing of knowledge and experience and this class was no different, only the issues at stake were more extreme!

“Extreme stakes?” you ask, let’s take a simplified look at the each of these issues using Pascal’s Wager.





Pascal's Wager was seventeenth century philosopher Blaise Pascal's way of thinking about a truly difficult conundrum for him – "Should I believe in God?" He thought about it as a wager where the stakes were extreme – Heaven vs Hell.

Following the lead of a number of different authors, below we have captured Pascal's Wager in Table 1. Irrespective of one's position on the existence of God, Pascal's Wager certainly shows that the stakes can be seen as extreme.

Table 1: Pascal's Wager

	God exists	God does not exist
Believe in God	Heaven for eternity	A good time wasted
Disbelieve in God	Hell for eternity	No matter

Similarly, given some of the dire predictions, the stakes can be seen as extreme in the Climate Change and Carbon Tax debates.

Separately in the tables below we portray Pascal’s Wager for Climate Change and for the Carbon Tax. You will see from these simple analyses, the stakes are indeed potentially extreme for the key stakeholders as these issues literally have the potential to impact political careers, the overall economic wellbeing of our society and matters of life and death.

Table 2: Pascal’s Wager – Climate Change

	Humans are causing damaging climate change	Humans are not affecting the climate
Combat climate change	Avert economic and social disaster	Waste of scarce resources
Do not combat climate change	Economic and social disaster	No Matter

Table3: Pascal’s Wager – Carbon Tax

	Behaviour will change if there are financial incentives	Behaviour will not change if there are financial incentives
Introduce a carbon tax	Carbon emissions are reduced	Failed policy and political backlash
Do not introduce a carbon tax	Opportunity missed	No Matter

Pascal’s Wager adopted in this way paints a very simple picture. As risk professionals, our CPRM class knew it was not so simple and that application of AS/NZS ISO 31000 would do more than shed light on the challenging decisions faced by governments, large carbon emitters, investors in green solutions and of course the myriad of small and medium businesses and consumers.

“There was no doubt it (AS/NZS ISO 31000) was completely valid and aided in our understanding of the issues each stakeholder group was facing and what their options were”

Key Findings

The first and most important outcome from the Masterclass was that AS/NZS ISO 31000 is a perfectly appropriate process to apply to such emotive and high profile debates. Given the participants were a group of CPRMs, this may not come as a surprise. However, the challenge we soon identified was the difficulty in establishing an appropriate context. We were in a “mock” application of 31000 and could not adequately account for one of the key principles of risk management – “Risk management is based on the best information available”¹.

In most cases when applying 31000, we as risk professionals are not the subject matter experts, we are the process experts who facilitate and guide the application of the process. What we found in the Masterclass was an absence of subject matter experts that could not be overcome by any amount of resource material that could be made available to the group and absorbed in a reasonable timeframe for a one-day workshop. ***The diversity of issues was just too great.***

Being in this situation provided an interesting perspective on the application of 31000 including:

- **Risk Assessment and Knowledge** – Risk management is a knowledge enhancer. As a group of knowledgeable professionals we could identify the issues, however, we did not have access to the experts to enhance collective knowledge to a point where we could make definitive decisions.
- **Risk Assessment and Integrity** – The integrity of information brought into a

debate and consequently into a risk assessment is critical. The events of “Climategate” in 2009² where emails and files of the Climatic Research Unit (CRU) at the University of East Anglia were hacked and published on the internet causing doubt over their integrity, immediately weakened the case of climate change activists and allowed more weight to be given to climate change sceptics.

- **Risk Evaluation and Risk Appetite** – Risk appetite is unique to an individual or group’s attitude towards risk taking and to how they currently feel about their imminent and longer-term wellbeing. This meant the Masterclass had to assess and evaluate risk without sound risk criteria on which to make judgments. This reinforced the obvious, that without a firm view of one’s appetite for risk, one is not able to make firm decisions.
- **Monitoring and Review** – Because of the rapid growth in published research on each side of the debates, monitoring and review is particularly important when forecasting future outcomes as there will be a need to constantly assess and reassess “facts” and assumptions.
- **Communication and Consultation** – The higher the stakes the greater the challenge to communicate risk and consult open-minded stakeholders whilst maintaining an open mind oneself. The Climate Change and Carbon Tax debates are so high-stake for politicians, large carbon emitters

¹ AS/NZS ISO 31000: Risk Management, Section 3 (f), Pg 7

² [The Telegraph \(UK\), 20 November 2009.](#)

and environmentalists, there is the potential for them to unwittingly place “blinkers” on and ignore new information or purposefully politicise minor issues for their own case.

For those attending the Masterclass when it came to Applying AS/NZS ISO 31000: *Risk Management* to emotive, high profile and highly uncertain issues, there was no doubt 31000 was completely valid and aided in our understanding of the issues each stakeholder group was facing and what their options were.

We soon recognised one of the greatest challenges for the key stakeholders active in the debates were to ensure they have the right information, sifted free of all the “noise” to ensure risk assessments are reasonable and that they have comprehensive communication and ongoing consultation plans to share and engage with others on their findings.

In the pages that follow we outline in more detail our application of the risk management process to these high-stake debates and we hope this paper provides additional insight to those tasked with decision-making under such uncertain conditions where the stakes are extreme.

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The Process

AS/NZS ISO 31000 is a principles and guidance standard, so there is some poetic licence in applying it. Perhaps surprisingly for some, our group of CPRMs quickly came to terms with the objectives for the Masterclass and the challenge set and moved quickly into application mode. As all good risk professionals should know, the first step in the risk management process is to establish the context for managing risk.

Establishing the Context

In order to establish the context for the risk process to follow, the CPRMs were asked to:

- Identify the key stakeholders in these debates and to form them into stakeholder groups
- Identify each groups objectives from participating in each debate
- Describe in broad terms the likely appetite for risk for each group.
- Identify, where possible, any irrefutable facts.
- Identify, where possible, the weight of public and expert opinion in the respective debates.

The four stakeholder groups were:

- Government
- Large Carbon Emitters
- Other Business and their Advocates
- Consumers and their Advocates



The identification of key stakeholders was a straightforward task and the grouping of stakeholders was not difficult either. Almost as straight forward was identifying the objectives for each group. Articulating Risk Appetite for each group and assessing the quality of our data by listing irrefutable facts and confirming the weight of opinion was substantially more challenging.

Without a clearly defined context including a firm view of one's appetite for risk, one is not able to make firm decisions.

- **Risk Appetite** – It was difficult to articulate, even in a broad sense, the likely risk appetite for each group of stakeholders identified. Risk appetite is unique to a group's attitude towards risk taking and to how they currently feel about their imminent and longer term wellbeing. This meant the Masterclass had to implement the remainder of the risk management process without sound risk criteria on which to make judgments. This reinforced the obvious, that without a firm view of one's appetite for risk, one is not able to make firm decisions.
- **Facts and the weight of public opinion** – Because of the extreme diversity of issues from water to forestry, to coral reefs and polar ice caps, to weather events and carbon emissions, not to mention those who did not accept climate changes as a reality, it was clear we didn't have many irrefutable facts and those we had were very high level, for example:

Table 4: Irrefutable facts

<p>Irrefutable facts concerning Climate Change and the Carbon Tax</p>	<ul style="list-style-type: none"> • They are highly emotive topics within the community. • Australian Government is taking actions that will require expenditure by government and will require expenditure by business. • Government has introduced a tax which is linked to Climate Change. • The insurance industry is extremely concerned about increased frequency of extreme / high impact weather events. • The debate and the actions by governments provide opportunities for innovation. • Political uncertainty about the future of the Carbon Tax. • Uncertainty whether the Carbon Tax will have sufficient effect to change behaviours.
<p>Weight of opinion concerning Climate Change and the Carbon Tax</p>	<ul style="list-style-type: none"> • Opinion is divided. • Younger people are more emotive on the subject. • Defining the weight of opinion is complex. • Carbon Tax seen as a tax by some. • Scepticism about where the funds will end up.

Establishing the Context: Conclusion

Application of the first step in the risk management process defined in 31000 reinforced what we as CPRMs already knew: getting it right up front cannot be understated. How often do we see a risk assessment start with:

- *Assumed knowledge concerning key stakeholders*
- *Lack of clarity of objectives*
- *No discussion on risk appetite*
- *Data that has not been tested for its integrity*
- *Data analysis that has not been peer reviewed*
- *No data at all!*

There was no doubt in our minds that the key stakeholders in these debates had applied massive resources in this area. The question we asked ourselves was "Have they a clear view on their own appetite for risk?" That is, are they clear on what they will be willing to wager with such high stakes and why?

Risk Assessment

As the Masterclass was being asked to apply the next steps in the risk management process in a “mock” situation, this segment of the workshop focussed on the key issues each stakeholder group would need to address in order to conduct an adequate assessment of risk.

It was noted during our discussions that although we were unable to apply likelihood and consequence as per a normal risk assessment, the role of this level of analysis would be an imperative in any risk assessment of highly uncertain and potentially extreme events. Risk assessment is a most valuable aid to assist the human mind’s ability to accommodate a multitude of possible near and distant intertwined future scenarios.

The key issues for a sound risk assessment identified included:

Table 5 Key Issues to consider when conducting a risk assessment

Stakeholder Group	Key Issues
Government	<ul style="list-style-type: none"> • Making decisions with conflicting information – How to pick whose analysis and advice to rely on? • Seemingly unlimited sources of information – How to know how many resources should be applied to understanding the risk? • Variation of impact across population groups – When assessing impacts provided by advisors, how do we account for different impacts on different population groups and be seen to be treating all constituents equally? • Reputation trap – Governments will need to be seen to be doing something positive, however, beware the unintended consequences of actions. • Long term decisions required with short-term political cycles – Do we conduct our risk assessments based on the short-term so we can deliver what we believe in the long-term or do we consider a much longer time horizon that may impact us politically? • Communication through all the “noise” – Even if we get this right, what do we need to do as part of the risk assessment to allow us to get our communication right when we explain our decisions?
Large Emitters	<ul style="list-style-type: none"> • Making decisions with conflicting information – How to pick whose analysis and advice to rely on? • Cost impact compared to competitors – How much research do we need to conduct to understand the position of our competitors? How important is it to know this? • Implications for capital expenditure – What are our potential sources of funds and how do they compare to our competitors? • Potential to innovate – Don’t focus solely on the downside, there can be plenty of upside if we set our risk appetite appropriately.

Other Business and their Advocates	<ul style="list-style-type: none"> • Making decisions with conflicting information – How to pick whose analysis and advice to rely on? • Impacts will differ short, medium and long-term – Should we be short, medium or long-term focussed? • Potential to innovate – Don't focus solely on the downside, there can be plenty of upside if risk appetite is set appropriately.
Consumers and their Advocates	<ul style="list-style-type: none"> • Making decisions with conflicting information – How to pick whose analysis and advice to rely on? • Impacts will differ short, medium and long-term – Should we be short, medium or long-term focussed? • Potential to be a winner and not a loser – Don't focus solely on the downside; ensure advantages are built into the assessment.

Risk Assessment: Conclusion

Noting that the Masterclass could not appropriately apply the risk assessment steps in the risk management process defined in 31000 because of the “mock” situation, there was strong agreement that the process remained entirely valid. It is clear from the table above that the most challenging factor influencing a risk assessment by any of the stakeholders is the myriad of conflicting information. For anyone conducting a risk assessment, we cannot stress more firmly the need for your information to be credible, comprehensive and as precise as you can reasonably afford under the circumstances. A poor risk assessment can be much worse than no risk assessment at all.

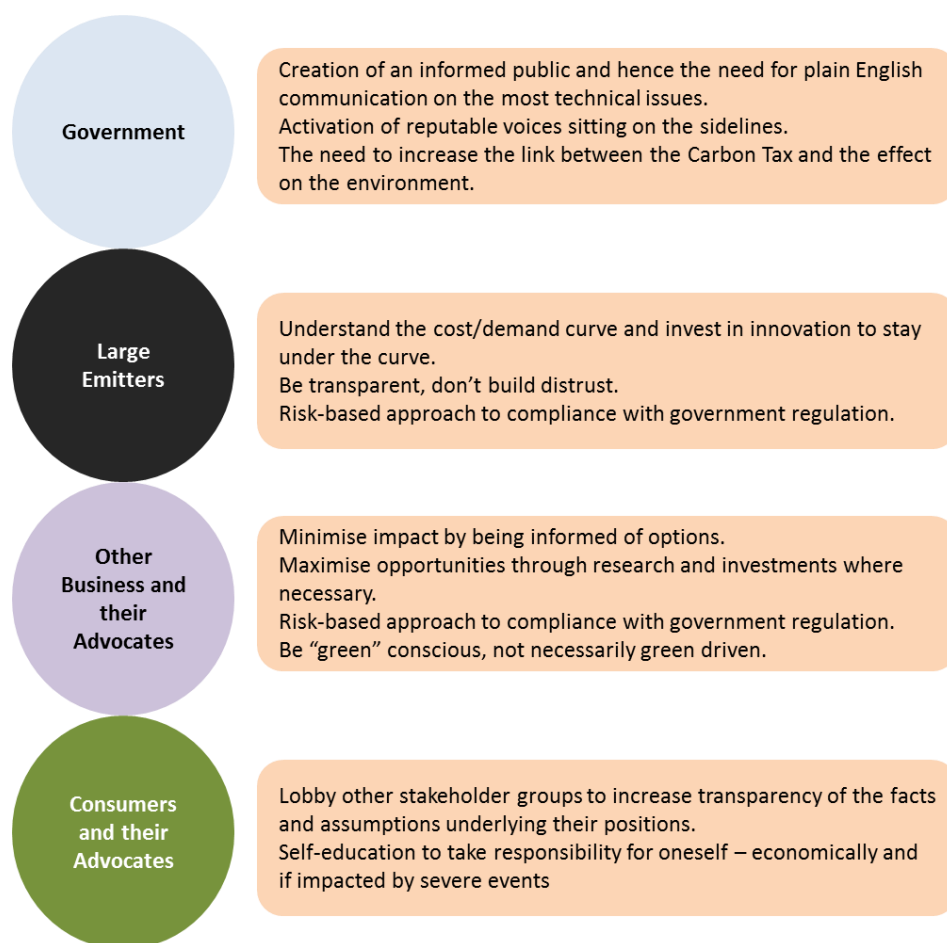
The second major point was the importance for each stakeholder group to consider different timeframes when articulating their Risk Appetite and when applying it during the risk evaluation stage of a risk assessment. In these debates there is increasing variance of predictions, the longer the timeframe considered.

A poor risk assessment can be much worse than no risk assessment at all.

Risk Treatment

After considering the issues concerning risk assessment for Climate Change and the Carbon Tax debates, the Masterclass turned to considering the issues for each stakeholder group in managing any perceived risk. The figure below provides some of the insights gleaned during the workshop:

Figure 1: Risk treatment considerations



Risk Treatment: Conclusion

In considering the risk treatment issues for each stakeholder group, it became quite evident that for governments and key industry players, there was a lack of certainty that their risk treatments would work irrespective of the findings of their risk assessments because of the communication and credibility issues. Contrary to what one might think, the Masterclass did not see this as a reason to ignore the risk management process, in fact it was a reason to more frequently monitor the effect of risk treatments on risk levels by revisiting underlying assumptions and the data relied on.

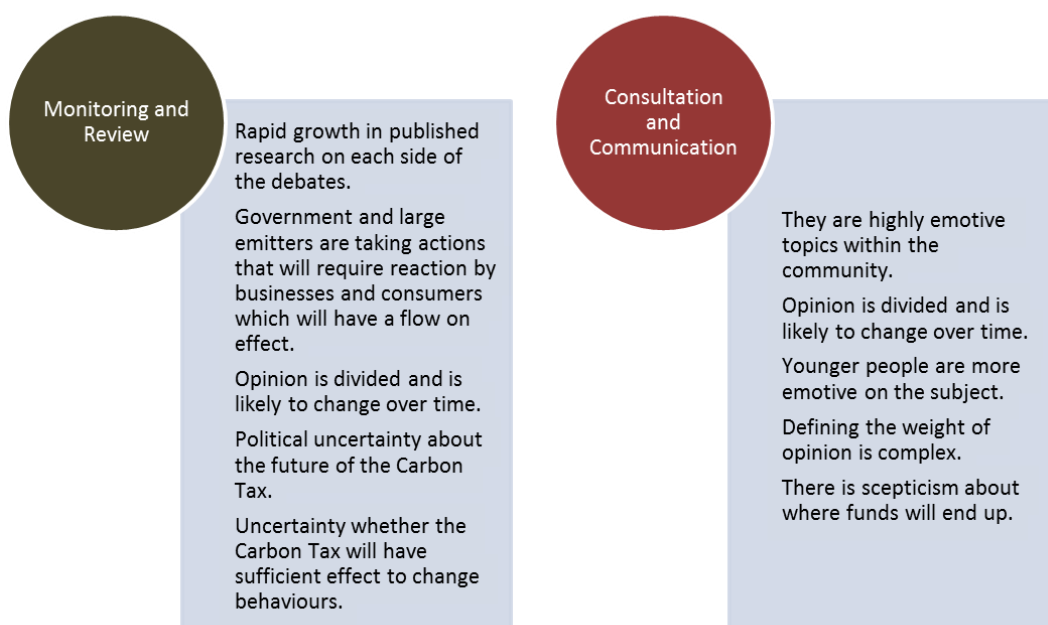
The greater the uncertainty the greater the need to frequently monitor the effect of risk treatments on risk levels by revisiting underlying assumptions and the data relied on.

Monitoring and Review and Communication and Consultation

Throughout the Masterclass, the challenge of each stakeholder group to become informed and to stay informed was evident. Equally, members of the Masterclass commented frequently that for these big issues there is often information overload for the public and less impacted businesses which makes it very hard for key stakeholder groups to get their message across.

Some of the issues raised during the application of the risk management process that specifically related to Monitoring and Review and to Communication and Consultation are in the figure below:

Figure 2: Issues



Monitoring and Review and Communication and Consultation: Conclusion

As far as “applying” these elements of the risk management process to highly emotive, high profile and highly uncertain issues such as Climate Change and the Carbon Tax, the Masterclass found the importance of these processes were highlighted by default when establishing context and considering the risk assessment and risk treatment issues. It was observed that for this application of the risk management process, Monitoring and Review was incredibly important because of the fast changing landscape and how it can change the “facts” and assumptions within risk assessments on which decisions were based. Equally, the highly emotive elements of the debates would need close consultation, major efforts in communication and constant monitoring. Without doubt these are essential elements of the risk management process and are completely valid for such high profile debates.

In Closing

Risk in AS/NZS ISO 31000 is defined as the “effect of uncertainty on objectives”. There is no doubt that Climate Change and the Carbon Tax presents high levels of uncertainty and that the often differing objectives of parties to the debate and the extreme stakes at risk generate high emotion. It came as no surprise to the Masterclass that the application of 31000 demonstrated its worth when applied to these debates because it drives risk based decision-making which is essential for these complex issues. We hope the insight we have brought will help others to trust the 31000 process, to apply it diligently so as to seek out and conquer more challenges - even the high profile, highly emotive and highly uncertain ones.

Managing Risk when the Stakes are Extreme

A paper outlining the experience gained by a group of Certified Practicing Risk Managers (CPRMs) from applying AS/NZS ISO 31000: *Risk Management* to highly emotive, high profile and highly uncertain issues such as Climate Change and the Carbon Tax.

Why become a CPRM?

There are many answers to this question. First a CPRM designation provides recognition of your efforts to learn your craft, your commitment to self-development and your years of experience. It also flags to others you have been recognised within your profession to have attained high levels of expertise and competence. Finally, it provides you with access to high quality continuing education opportunities run by the RMIA exclusively for CPRMs. These opportunities include networking with CPRM peers who are also experts in their own fields of engagement in the risk profession.

