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Dear Professor Garnaut

Re: IFSA Submission: Issues Paper 2 - Financial Services for Managing Risk: Climate Change and Carbon Trading

Thank you for the invitation to provide input on the Garnaut Climate Change Review's second issues paper entitled 'Financial Services for Managing Risk: Climate Change and Carbon Trading'. We greatly appreciate the extension of time during this busy period to lodge the submission.

IFSA is a national not-for-profit organisation which represents the retail and wholesale funds management, superannuation and life insurance industries. IFSA has over 140 members who are responsible for investing over \$1 trillion on behalf of more than ten million Australians. Members' compliance with IFSA Standards and Guidance Notes ensures the promotion of industry best practice.

IFSA's mission is:

...to play a significant role in the development of the social, economic and regulatory framework in which our members operate, thereby assisting members to serve their customers better.

We regard social, environmental and climate change related issues to fall within IFSA's mandate. Although our industry has varying levels of commitment and expertise in this area, we acknowledge that any policy and regulatory development on climate change and an emissions trading scheme will directly affect the social and economic backdrop in which our members operate.

The role of IFSA's members

IFSA's members' operating activities predominantly entail wealth management and protection. IFSA's members are involved in and responsible for managing approximately 95% of Australia's managed investments.

We note that a significant proportion of Australia's managed investments are in long term savings schemes, including superannuation. Therefore, investors and fund/investment managers involved in these schemes will also have a long term focus on risks and opportunities, including environmental and climate change related corporate governance considerations.

Corporate governance and climate change

We recognise that corporate governance is concerned with ensuring that a company's management practices are aligned with the interests of shareholders. Sound corporate governance principles increase investor confidence in the integrity and efficiency of the Australian capital market, which in turn enhances the competitiveness of the Australian economy.

While Australian companies have generally demonstrated a high standard of corporate governance, IFSA members continue to expect Australian boards to exercise strong leadership to continually improve disclosure and accountability practices.

As major shareholders, IFSA members are in a position to promote improved company performance that provides positive benefits to all shareholders and the economy as a whole. While shareholders are not involved in the day to day management of companies, the Corporations Act, ASX Listing Rules and industry best practice provide many opportunities for shareholders to monitor and influence company decision making which drives ultimate company performance.

IFSA recognises that investors and shareholders increasingly expect that the board and senior management of companies will turn their minds to effectively managing climate change related risks and opportunities.

Furthermore, we note that a growing number of Australian firms are signing up to the United Nation's Principles for Responsible Investment. These Principles provide a framework for including environmental, social and governance issues in investment decisions and highlight our industry's interest on the impact of these issues, including climate change.

IFSA's position on climate change

The impact of climate change will affect the value of investments managed by IFSA's members and will therefore represent an additional governance and investment risk that will need to be managed.

IFSA is therefore committed to being involved with Government on climate change policy discussions as an active stakeholder in the development of an emissions trading scheme, necessary emissions disclosure framework and the positioning of Australia as a regional hub in the Asia Pacific carbon markets.

Establishment of an Australian regional carbon trading market

Globally, carbon markets are expected to continue to grow at a rapid pace as more developed and developing countries begin to respond to climate change pressures through emission trading mechanisms.

According to the World Bank, the carbon market grew in value to an estimated US\$30 billion in 2006, three times greater than the previous year.¹

Significantly, Australia is well regarded in the region for the strength of its regulatory institutions and overall high level of market integrity. This places Australia in an excellent position to develop into a regional hub for carbon trading activities.

From a regional financial centre perspective, ensuring that any Australian Emissions Trading Scheme (ETS) is able to integrate with existing and developing schemes in the region should be seen as a key policy objective.

¹ State and Trends of the Carbon Market 2007, World Bank.

Importantly, the establishment of an Australian regional carbon trading market will provide significant benefits to Australia and the region by:

- Providing a more liquid market for permits/credits.
- Providing a more accurate mechanism for pricing the true cost of emissions.
- Remove possible 'forum shopping'/arbitrage opportunities which are likely to reduce the level of overall emission reductions and distort rational economic production decisions.
- Provide countries in the region with an alternative to the costly establishment of their own ETS, particularly where the necessary scale or expertise may not exist.

Given the likely significant benefits that would flow from Australia establishing a regional ETS, Australia should move quickly to engage with interested countries in the region to offer them the opportunity of being a member of Australia's ETS. This inclusive approach will help prevent the creation of multiple trading regimes in the region – allowing the development of an Australian scheme with regional members.

As indicated above, there are likely to be significant gains from early action on this front, both from a trade perspective and emission reduction perspective.

Additionally, the establishment of a Regional ETS will significantly mitigate against the emissions and production transferring to another country in the region due to the lower operating cost that may arise from a lower carbon price in that country.

Naturally, regime parameters/regulations will need to be as internationally consistent as possible – enabling other eligible ETS permits to be traded on the Australian market and allowing Australian permits to be traded on other markets.

Achieving this level of functionality may require new Treaties to be entered into between participating countries to enable recognition and trading of permits/credits.

Tax efficiency and transparency will also be crucial for the success of any Australian based Regional ETS. There will be a need to ensure that the taxation implications for foreign companies or intermediaries trading on an Australian carbon market are neutral (taking into account the taxation of any "gains" in their home country) and competitive vis-a-vis alternative markets in the region and beyond. We therefore understand the importance of achieving tax neutrality with regards to contracts if Australia seeks to become a regional trading hub.

Finally, barriers to the participation of foreign companies or intermediaries need to be kept to a minimum to ensure as open and liquid a market as possible, while at the same time maintaining the integrity of the market.

Treaties, of the kind noted above, will need to reflect some degree of recognition of the home country's monitoring and regulation in this area in order to allow for recognition of participants, intermediaries and credit generating activities in a way that does not impose significant additional burdens.

Other industry initiatives

We note that IFSA has embarked on a range of other projects to further explore climate change and contribute to the policy formation and design issues regarding carbon trading:

Examining the economic impact of alternative permit allocations

IFSA, in partnership with the Investor Group on Climate Change, has embarked on a research project to explore the various impacts emanating from alternative emissions trading scheme

design structures and to highlight the impacts of these schemes in terms of emissions, electricity pricing and output.

It is envisaged that the research will assist the investment community to understand the potential impacts associated with alternative design structures of an emissions trading scheme. As long term investors across all sectors of the economy it is important that an emissions trading scheme achieves an efficient market and certainty, particularly in long-term decision making.

IFSA notes that the research is due for completion during the first quarter of 2008 and, upon finalisation, would commend this research as a supplementary submission to the Garnaut Review.

IFSA/Deloitte Future Leaders Award – Climate change research the 2007 winner

The IFSA/Deloitte Future Leaders Award is a sponsorship program that encourages young people to have a say in the future direction of the industry and its response to a range of current issues. The program sees wealth management and financial services employees under the age of 30 developing innovative research papers with senior managers assigned as mentors from their respective firms.

In 2007, participants had the choice of preparing a paper on a variety of public policy issues, including the implications for the investment industry of climate change and possible policy responses to climate change. IFSA notes that the winning entry came from the climate change category and included a key issues presentation on the successful paper before IFSA's membership. The winning paper has been attached for the Committee's reference (see attachment A).

Thank you again for the opportunity to raise these important matters with the Committee. We would welcome participating or hosting a roundtable with the Committee and relevant stakeholders. IFSA can play a central role in facilitating the implementation of a carbon trading market, including the promotion of best practice through IFSA Standards and Guidance Notes and direct access to industry forums such as key issues presentations and the IFSA Conference.

If you have any questions in relation to this submission, please do not hesitate to contact me or Joseph Sorby on (02) 9299 3022.

Yours sincerely



Richard Gilbert
Chief Executive Officer

Cc: Senator the Hon. Penny Wong
Minister for Climate Change and Water

Senator the Hon. Nick Sherry
Minister for Superannuation and Corporate Law

The Hon. Chris Bowen MP
Assistant Treasurer and Minister for Competition Policy & Consumer Affairs

Attachment A: Future Leaders Climate Change research: 'Climate Change – implications for the investment industry'.



Climate Change

Implications for the Investment Industry

**IFSA / Deloitte
Future Leaders
Award**

**Ben Hare
Goldman Sachs JBWere Asset
Management**

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2 Executive Summary

Overview of climate change

- The scientific consensus is that human greenhouse gas emissions have contributed to global warming
- Unabated carbon emissions will result in severe climatic consequences

Policy responses to climate change

- Primary policy responses involve imposing a cost on carbon emissions by the implementation of an emissions trading scheme or a carbon tax.
- Ancillary policy measures, such as research grants and deforestation regulation, will be necessary to create immediate impact
- Australia is set to adopt an emissions trading scheme by 2012

Impact on Investment Strategies

- Company valuations will be affected by:
 - Direct impact of climate effects such as extreme weather events and water scarcity
 - Policy responses to climate change through costs imposed on carbon emissions and increasing input costs, particularly energy.
- Investment strategies will need to incorporate climate change issues by assessing:
 - Forecasts of future carbon prices
 - The emissions footprint of companies
 - New revenue opportunities arising out of climate change
 - Hedging strategies using carbon markets

Impact on the Investment Industry

- Modest increases in input costs such as energy and paper, and staffing costs for managing climate change strategies
- New product opportunities arising from climate change and related policy responses

Industry responses to climate change

- Play a leading role in the development of emissions reporting standards

- Develop disclosure principles for companies surrounding climate change issues
- Develop industry standards for member organisations including:
 - Adoption of carbon neutrality targets
 - Disclosure requirements of policies relating to climate change
- Contribute to the policy formulation debate

3 Overview of Climate Change

Global warming is caused by the excessive accumulation of greenhouse gases, in particular carbon dioxide, in the atmosphere. Since the industrial revolution, carbon emissions from human activity have risen dramatically, contributing to an increase in the concentration of greenhouse gases in the atmosphere. Increasingly, the scientific evidence suggests that climate change is a growing concern. The Intergovernmental Panel on Climate Change recently suggested that there is a greater than 90% probability that anthropogenic emissions have contributed to global warming¹. Estimates of the magnitude of the problem suggest that the accumulation of greenhouse gases could contribute to an average 5°C increase in temperatures by the end of the 21st century under a 'business as usual' scenario². Such a change would have catastrophic consequences including rising sea levels flooding coastal areas, an increase in extreme weather events (e.g cyclones, flooding, drought and bush fires) and substantial shifts in rainfall patterns across the globe. Appendix 1 shows the types of climatic effects that could potentially be observed under various global warming scenarios.

While the more dramatic effects are easy to conceptualise, there are a raft of consequences that are not as immediately apparent. For example, small crustaceans' breeding habits are extremely sensitive to even small variations in sea temperatures. An apparently minor consequence like this can have a material impact on the food chain of fisheries and therefore affect the availability of food in many developing economies.

¹ IPCC, Summary for Policymakers In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group 1 to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press, 2007.

² Stern, N., *Stern Review on the Economics of Climate Change*, Cambridge University Press, 2006

4 Policy Responses to Climate Change

The focus for policy responses to climate change needs to be on achieving emissions abatement sufficient to curb the rate of global warming while minimising the economic cost imposed on the economy.

The global problem of climate change is an example of a market failure. Producers of greenhouse gases impose a cost on the global economy but do not bear the consequences of that cost directly. The centrepiece of any policy response to climate change therefore needs to impose a cost on carbon emissions in order for markets to properly consider the negative externalities of emitting greenhouse gases. This can be achieved either by a market-based emissions trading scheme or through the introduction of a carbon tax.

4.1 Emissions trading

Emissions trading schemes involve the creation of a market for permits to emit CO₂e. The typical structure is a 'cap and trade' scheme where the government issues enough permits to target a certain level of emissions that is consistent with the objective of curbing global warming. Initially, permits are either auctioned or allocated (the term 'grandfathering' is used to describe the allocation of permits on the basis of historical emissions). Such a trading scheme provides an efficient incentive for emissions abatement. Firms who have low cost options for emissions abatement will choose to reduce emissions and then sell excess permits in the market. Those with higher costs of abatement will choose to purchase extra permits rather than abate. The overall cost to the economy is therefore minimised. Offsets for activities that act as carbon sinks are also issued and can be sold to firms who need to purchase additional permits. Innovation is therefore encouraged both through abatement of current emissions and through the development of carbon sinks.

The structure of an emissions trading scheme is important to its efficient operation. Careful consideration needs to be given to:

- The emissions cap required to resolve the problem
- The pathway of emissions caps to ensure that the initial economic impacts are manageable
- Equity issues in the initial allocation of permits. Grandfathering vs auctioning.

- The effect of the scheme on the competitiveness of trade exposed industries.
- The possible adoption of an upper price limit for carbon emissions in order to limit unanticipated costs to the economy
- What offsets are permitted under the scheme
- The ability to integrate the scheme with similar international schemes

Creating an emissions trading scheme will also lead to derivative products emerging that provide the ability to hedge carbon emissions exposures. Up to 95% of the volumes in the EU scheme have occurred in derivative trades³.

The Prime Ministerial Task Group on Emissions Trading recently released its report (May 2007) recommending that Australia implement an emissions trading scheme by 2012.

4.2 Carbon tax

A carbon tax, as its name suggests, involves the government imposing a tax on carbon emissions in order to create a disincentive to emit. Rather than setting the quantity of emissions produced, as under a cap and trade scheme, a carbon tax involves setting the price for carbon and letting the market determine the output of emissions. Such an approach provides greater economic certainty for investment as the price of emissions is known. However, it is more difficult to target the overall emissions level required to curb global warming. A carbon tax, while providing a disincentive to produce emissions, lacks the incentive mechanism for innovation in abatement options and carbon sinks.

4.3 Other Policy Responses

The urgent need to reduce emissions makes it necessary for policies that supplement the creation of a carbon price. Some possibilities include:

- Incentives and research grants for low emission technology development.
- Environmental planning regulation targeted at issues such as deforestation and housing construction.
- International coordination on climate change issues.
- Consumer awareness schemes such as appliance efficiency ratings.

³ The Department of the Prime Minister and Cabinet, *Report of the Prime Ministerial Task Group on Emissions Trading*. Australia. May 2007.

5 Impact on Investment Strategies

The wide-reaching effects of climate change and associated policy responses will have a significant impact on how institutional investors and investment managers invest. Managers will need to consider the implications that climate change has for company valuations and incorporate climate change issues into investment strategies.

5.1 Company valuations

Material impact on company valuations will be seen both from the direct impacts of climate change and the accompanying policy responses.

Direct impacts of climate change

While the more severe climate effects of global warming (i.e from a 5°C or more increase in temperatures, see appendix 1) would have material influence on company profitability, it is likely that such effects are still some time off (50 years or more) and/or will be mitigated by global efforts to reduce emissions. As such, the valuation effect of events such as substantial rises in sea level would be moderate due to both a low probability of occurrence and because changes in cash flows discounted from more than 50 years in the future are immaterial to present values.

Of greater relevance in assessing company valuations will be the climate effects of smaller temperature increases (1°C – 3°C). These climate effects will be difficult to avoid and observable in a much shorter time horizon. Examples of impacted companies can be found in table 1 below.

Climate effect	Potentially negatively impacted companies	Potentially positively impacted companies
Higher frequency of extreme weather events	Insurance companies, Infrastructure assets (Telecommunications, Electricity transmission etc)	Construction, Building materials, Engineering services companies
Water scarcity in drier areas	Hydro, coal and gas electricity generators, companies dependent on processing water including mining and some basic	Wind electricity generators, Desalination industry providers

	manufacturing and consumer products companies.	
Falling agricultural yields	Grain handlers, companies dependent on agricultural inputs such as food & beverage producers, transport companies.	Fertiliser manufacturers
Tropical reef bleaching	Tourism operators	

Table 1: Examples of companies directly affected by modest climate change.

Impacts from policy responses to climate change

Policy responses to climate change are likely to have an impact on company profitability in the immediate future. The introduction of a price on carbon emissions will have significant impact on industries and companies that have high levels of greenhouse emissions, as well as those that are energy intensive. Obtaining permits to cover a company's emission footprint will incur a cost. Industries such as power generation will see a direct cost to them. Furthermore, downstream effects will be experienced by companies that are not substantial emitters themselves but have inputs whose production is emission intensive. Highly energy intensive businesses, such as aluminium smelters, will be affected by increases in energy prices arising from the implementation of emissions trading. The impact on any one company's profitability will depend on its ability to pass on rises in input costs to its customers. Hence, companies with a poor competitive position will bear a greater impact. Much of the economic cost is likely to end up being borne by the end consumer.

Citigroup Research estimates that the industries that have the largest financial exposure include steel producers, coal producers, miners, integrated energy retailers, transport and construction companies⁴.

The structure of the new emissions trading scheme and, in particular, the process by which permits are allocated can have a material effect on company valuations. Grandfathering of existing levels of emissions can lead to windfall gains for some firms with substantial emissions, as seen in the European experience⁵.

⁴Prior, E., *Climate Change and the ASX100*, Citigroup Research, Nov 2006.

⁵ Lewis, M. C., *Presentation: Restoring confidence in the EU ETS: Lessons learned for Phase 2*. Deutsche Bank. June 2007

5.2 Incorporating climate change into investment strategies

To properly assess the effect of climate change and associated policy responses on company valuation it is necessary to obtain data as to what the emissions footprint of the company is and how the company is addressing the issue of climate change within its business. At this stage there is no requirement or standard for reporting of emissions in Australia. The Carbon Disclosure Project Report 2006 for Australia & New Zealand, a collaboration between the Investor Group for Climate Change (IGCC) and the worldwide Carbon Disclosure Project, solicited responses from companies in the S&P/ASX 100 and the NZ50 indices on their corporate policies with respect to climate change including disclosure of emissions footprint. It provides a useful data source for information on the impacts of climate change on company valuation.

After accessing the necessary data, the impact on company valuation needs to be assessed. Investment strategies should consider the following:

- Forecasts of the future price of carbon
- Profitability impact on company from purchasing permits to cover emissions
- Effect of near-term climate change phenomena on company operations
- Probability weighted assessment of the impacts associated with larger scale temperature rises
- The management's abilities and strategies to mitigate the effects of climate change and to grasp opportunities that arise
- To what extent the company is hedging its emissions exposures
- Contribution to profitability of new market opportunities arising out of climate change

The creation of carbon trading markets will enable investors to hedge emissions exposure using derivatives. Where investment mandates permit, this will enable investment managers to manage their portfolio risk exposures from carbon emissions.

Hedge funds may also be able to implement arbitrage strategies between the various emissions trading schemes.

6 Impact on the Investment Industry

The financial sector is likely to be one of the few industries to be a net beneficiary of climate change as a result of the opportunities arising from the creation of emissions trading markets. For the investment industry in particular the impact is likely to be modest, with small rises in costs offset by the potential for new revenue opportunities.

6.1 Costs

The introduction of a price for carbon will see increases in some of the input costs for the investment industry such as energy and paper. However, these costs are generally a small part of the cost structure of the industry so the impact will be marginal.

To the extent that investment firms are required/desire to measure their emissions footprint and/or achieve carbon neutrality there will be additional costs incurred through third-party verification costs and staffing.

Additional staffing costs will also be required to:

- Stay abreast of the issues
- Incorporate climate change assessments into investment strategies
- Communicate the firm's environmental approach to clients and stakeholders

6.2 Opportunities

New Product Opportunities

The combination of enhanced concern about climate change at the consumer level and the creation of new trading markets creates opportunities for product innovation for the investment industry.

While Socially Responsible Investment (SRI) funds have been in existence for some time, the increased public debate about climate change is likely to lead to increased interest in such products. SRI usually involves considering a much wider range of issues than just climate change, for example other environmental issues, corporate governance, workplace relations and other ethical issues are often incorporated

within the investment mandate. Nevertheless, as consumer concern about climate change increases, those funds that formally address the issue are likely to experience greater demand.

An example of a new fund that would cater to the growing social consciousness of the climate change problem would be a carbon neutral fund. There will be increasing disclosure by companies of emissions produced. For an investment process that uses a quantitative optimisation technique for portfolio construction it would be a relatively simple matter to introduce a constraint on the optimisation that includes achieving a net emissions level of zero. In order to not overly constrain the portfolio's ability to generate returns, purchasing carbon credits could also be included in the optimisation to the extent that the underlying portfolio had positive emissions. In the short-term these credits could be purchased in the European market until the Australian scheme was established. Data on emissions would be essential to create such an investment strategy. It may be necessary in the short-term to include estimates of a company's emissions footprint where disclosure is not available.

With the establishment of emissions trading, it would also be possible to create funds that invest in the tradeable emissions permits. The market for such a product is not likely to be significant as the scope for alpha generation would be limited due to the narrow investment options. Essentially an active manager would only be able to take a position on the shape of the forward curve and also any arbitrage opportunities between emissions trading scheme. This would suggest that such a fund would more likely be targeted as a beta exposure to the 'asset class'. The demand would only come from small retail investors in this case, as large investors would simply be able to access the carbon market themselves.

Another attractive new product may be to create a fund that invests in projects that generate carbon offset credits. Target investments would include projects that generate Clean Development Mechanism credits under the Kyoto protocol (or other such credits) that could then be sold in emissions trading schemes. Such a fund would in some ways be akin to an unlisted infrastructure fund with an environmental overlay.

Brand benefits

There are potentially positive brand implications for firms within the investment industry and the industry as a whole (through IFSA) taking an proactive approach to addressing climate change. Public concern regarding the issue has certainly escalated and bodies that are responsive will be seen in a more positive light.

7 Industry Responses to Climate Change

7.1 Emissions reporting

One of the key areas where the investment industry can make a contribution to the development of policy responses to climate change is in emissions reporting. An emissions trading scheme (ETS), such as the Australian Government is proposing, is dependent upon reliable reporting of emissions by affected companies. There is a wide array of possibilities for how emissions should be reported including issues such as:

- Scope – direct emissions, indirect energy emissions, other indirect emissions
- Timeliness – Annually, semi-annually, quarterly
- Reporting delay – maximum reporting lag after effective date
- Technical detail of how emissions from various activities are to be measured
- Third-party verification standards
- Integration with various existing international reporting standards
- Minimum level of emissions required for mandatory reporting obligations

As investors, the industry is well placed to comment on reporting standards required for effective operation of markets. Just as it has contributed to the formulation of corporate governance and remuneration reporting, there is a role for IFSA in providing input to the government as to what disclosures are required of companies as well as to engage with the Australian Accounting Standards Board as to how carbon exposures are best reported in financial statements.

Feedback from the European experience of running an ETS suggests that annual data disclosure is too infrequent⁶, leading to elevated volatility in the market. More regular reporting, such as quarterly, would lead to a more stable market. However, the cost of producing the required disclosures may lead to a compromise of semi-annual reporting being appropriate, which would fit well with financial reporting obligations for listed companies. Companies that already have quarterly reporting requirements, such as resource companies, should be encouraged to report more frequently.

⁶ Lewis, M. C., Presentation: *Restoring confidence in the EU ETS: Lessons learned for Phase 2*. Deutsche Bank. June 2007

It is important that any system adopted in Australia for accounting and reporting of greenhouse gas emissions be interoperable with other international reporting standards. Climate change is a global problem. Global coordination will be required in order to remedy the problem with the minimum economic cost. It is likely therefore that, at some stage, the Australian ETS will need to interconnect with other trading schemes; creating the need for consistency of reporting standards. The Greenhouse Gas Protocol, a partnership between the World Resources Institute and the World Business Council for Sustainable Development, has developed a reporting standard⁷ that has gained widespread acceptance internationally. It would therefore be an excellent starting point for developing the Australian rules. The Greenhouse Gas Protocol has three "scopes" for reporting emissions:

- Scope 1: Direct GHG emissions
- Scope 2: Electricity Indirect GHG emissions
- Scope 3: Other indirect GHG emissions.

The level of reporting required for a trading scheme would typically incorporate the first two scopes.

In order to have an emissions trading scheme functioning by 2012, the reporting infrastructure needs to be established in the immediate future. Ideally, it would be desirable to have a number of years of emissions data available before the commencement of trading to ascertain the volatility of such metrics and also to feed into setting an appropriate emissions cap. This would assist in avoiding the problem that the EU ETS had when it became apparent in mid 2006 that there had been an over-allocation permits, causing the carbon price to plummet. In order to accelerate the availability of emissions data, IFSA could partner with the IGCC and the Carbon Disclosure Project for the next update of the Carbon Disclosure Project report with a view to increasing the weight behind the request for information and to extend the coverage outside the top 100 companies.

7.2 Company disclosures

In order to appropriately assess the effects of climate change and related policies on company valuations it is necessary to understand both the emissions footprint of a company and its approach to dealing with climate change issues. The investment

⁷ The Greenhouse Gas Protocol, *A Corporate Accounting and Reporting Standard*, World Resources Institute and World Business Council for Sustainable Development, 2004.

industry could contribute to improving the disclosure of relevant information by providing guidelines, potentially as part of the IFSA Blue Book on Corporate Governance. The types of disclosures would include items such as:

- The type and level of emissions produced
- Designated board responsibility for considering climate change issues
- Effect of climate change on company strategy and structures for dealing with it

The questionnaire for the Carbon Disclosure Project⁸ would be a useful starting point as to the types of disclosures that may be beneficial to include.

7.3 Industry standards for IFSA member organisations

As mentioned earlier, there are positive brand implications for organisations that are proactive in dealing with issues of significant public concern such as climate change. It would reflect well on the investment industry to adopt standards for member organisations. These standards could include the following:

- Adoption of a carbon neutrality target for member organisations
- Disclosure requirements of policies relating to climate change

7.4 Influencing Government policy responses

At present there is significant debate as to what policy responses are required of the Government in order to combat climate change. The opportunity exists for the investment industry to contribute to this policy debate by providing submissions where appropriate regarding issues such as:

- Structure of the Emissions Trading Scheme
- Emission disclosure requirements for companies
- Scope of activities included as carbon offsets
- Specific policy measures in addition to the Emissions Trading Scheme

⁸ *Carbon Disclosure Project Report 2006 Australia & New Zealand*, Investor Group on Climate Change and Carbon Disclosure Project, 2006

8 Conclusions and Recommendations

Climate change is a serious threat to the well-being of the planet with significant ramifications for economies. There are substantial benefits in adopting a proactive approach to dealing with climate change.

Australia is likely to implement an emissions trading scheme in the near future, in conjunction with a range of supporting policies. The investment industry needs to ensure that it is prepared for potential policy outcomes and contribute to the debate surrounding policy options.

IFSA member organisations should:

- Be aware of the progress of climate change and associated policy responses
- Consider the impact of climate change on company valuations and update investment strategies to incorporate consideration of climate change issues
- Identify and develop new product opportunities such as:
 - Carbon-neutral funds
 - Investments that produce carbon offsets
- Improve brand perceptions by being proactive in addressing climate change issues
- Develop internal policies to manage the effects of climate change and associated policy responses.

IFSA should:

- Be aware of the progress of climate change and associated policy responses
- Contribute to the development of emissions reporting standards through consultation with the government and the AASB
- Develop disclosure principles for companies surrounding climate change issues - to be incorporated into corporate governance guidelines
- Develop industry standards for member organisations including:
 - Adoption of carbon neutrality targets
 - Disclosure requirements of policies relating to climate change
- Provide submissions to government where appropriate on issues such as:
 - Structure of the Emissions Trading Scheme

- Emissions disclosure requirements for companies
- Scope of activities to be included as carbon offsets
- Specific policy measures in addition to the Emissions Trading Scheme

9 Appendix 1: Environmental impacts of global warming

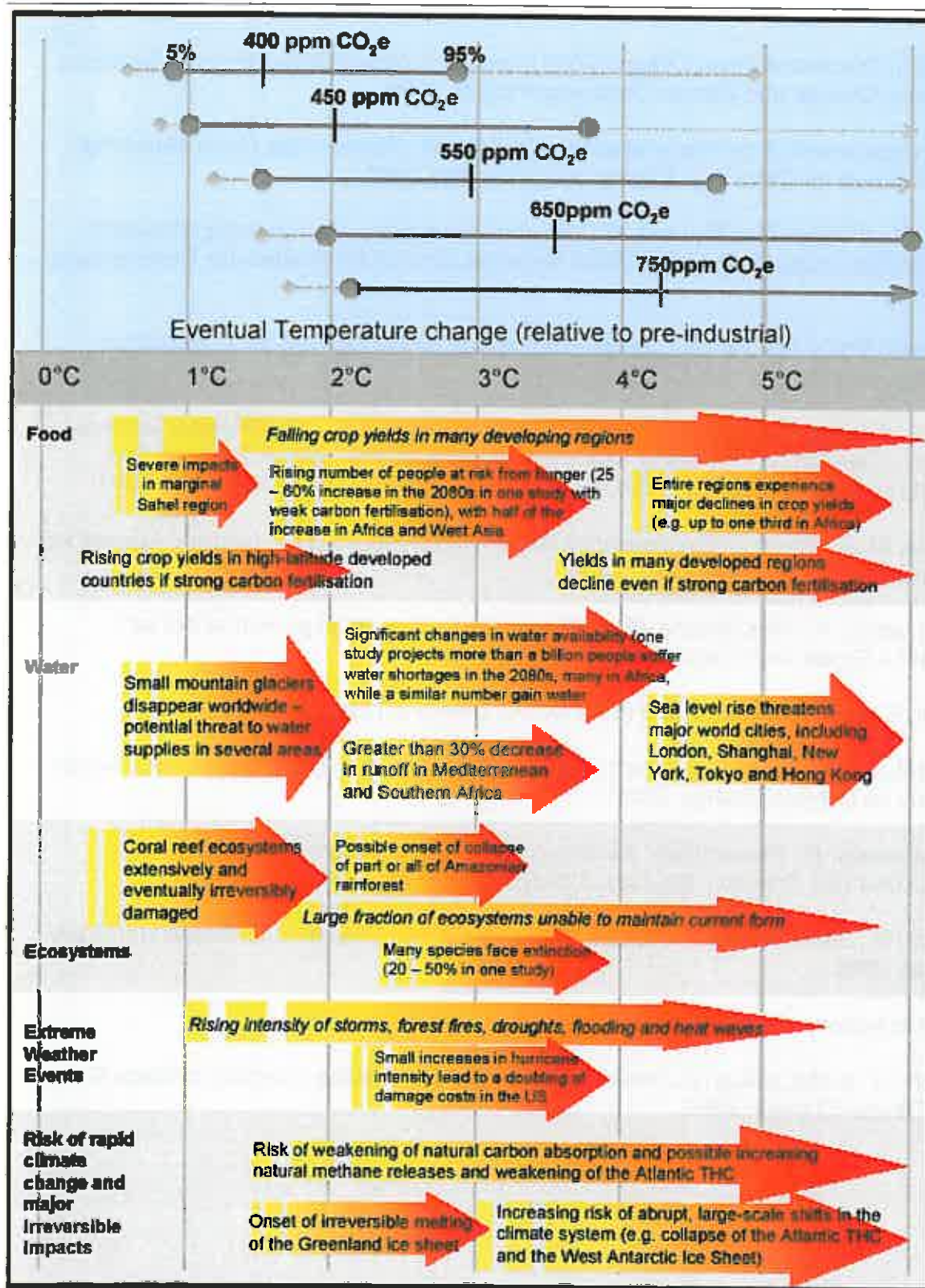


Figure 1. Environmental impacts associated with various degrees of global warming⁹. To give context, a 'business as usual' scenario will give rise to CO₂e concentrations upwards of 750ppm by the end of the century. Maintaining emissions at current levels will see CO₂e concentrations of around 550ppm by 2050.

⁹ Stern, N., *Stern Review on the Economics of Climate Change*, Cambridge University Press, 2006

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