Public

Compiled Comments on *Issues Paper on Climate Change Risks to the Insurance Sector*

30-Mar-18 to 29-Apr-18

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
1 - Q1 General comment on the draft Issues Paper				
Insurance Council of Australia	Australia	No	The Insurance Council of Australia (Insurance Council) appreciates the opportunity to provide its views in response to the International Association of Insurance Supervisors' (IAIS) draft Issues Paper on climate change risks to the insurance sector (the Issues Paper). In Australia, the changes in the severity of extreme weather events, brought on by climate change, will exacerbate a situation where extreme weather has already become more devastating and expensive for many metropolitan, regional and rural communities. The increasing migration and expansion of Australian communities, and their insured assets, into locations with significant exposures to extreme weather has already contributed to growth in disaster losses over the past 40 years. With expertise in risk management, general insurers play a critical role in communicating, managing and responding to the risks that many policyholders face today, as well as how those risks may evolve under a changing climate. In this context, the Insurance Council appreciates the comprehensive nature of the Issues Paper in outlining the impact of climate change on the insurance sector, now and in the future, and the relevance of this for its supervision. We note that the Issues Paper is intended to be primarily descriptive and is not meant to create supervisory expectations. The Insurance Council supports the general conclusion of the Issues Paper that insurance supervisors should seek to increase their understanding of climate risk, and develop supervisory capabilities to be able to accurately evaluate these risks. We agree that additional supporting material from the IAIS and the Sustainable Insurance Forum (SIF) on best practices for addressing climate risk issues in line with the IAIS' relevant Insurance Core Principles would be helpful for supervisors and insurers. With that said though, it is critical that the strong prudential foundations underpinning the sector are maintained and that the	Noted

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			supervisory frameworks provide an appropriate level of flexibility. This will help ensure that general insurer continue to be able to respond appropriately to large extreme weather events when they occur.	
Association of Bermuda Insurers and Reinsurers	Bermuda	No	The Association of Bermuda Insurers and Reinsurers (ABIR), representing the public policy interests of Bermuda's international insurers and reinsurers that protect consumers around the world, supports the overall vision of this paper and the creation of appropriate and effective policy that will assist in the mitigation and reduction of risk due to climate change. We note that the paper uses language that may be construed as alarmist. Although ABIR appreciates the desire to motivate readers to action, we caution the need to be "level-headed' as it is not in the interest of the general public for unintended consequences from regulation by policy makers over reacting. We also request more consistency across different sections and better distinguishing between primary insurers and reinsurers as different materiality, risk and knowledge should be reflected in regulatory approaches. We also request more detail on the consequences of different regulatory approaches. Finally, Proportionality should be key in any regulatory/supervisory initiatives aimed at addressing climate change concerns. ABIR appreciates this opportunity to provide feedback and looks forward to continued collaboration in this space.	Based on relevant available materials relating to climate change risks within the financial sector, we have checked to assess if language used in this paper is appropriate for this context, and deemed that it is largely appropriate. There have been certain instances where language has been amended. We have endeavoured to distinguish different types of insurers We have not set out consequences of regulatory approaches as this Issues Paper is a descriptive paper. We have amended text to reflect aspects of proportionality, specifically in the conclusions
ClientEarth	Global	No	ClientEarth is a non-profit environmental law organisation based in London, Brussels and Warsaw. We are environmental lawyers working at the interface of law, science and policy. Using the power of the law, we develop legal strategies and tools to address major environmental issues. ClientEarth's Climate Finance Project conducts research into the legal implications of climate change-related financial risk for a wide spectrum of market participants including insurance companies and regulators. We also engage with and conduct advocacy with these stakeholders in relation to the specific and the systemic risks of climate change. Overall, the paper provides a thought-provoking background to the climate change risks facing the insurance sector. We applaud the IAIS and SIF for tackling this critically important topic.	Noted

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			That being said, we believe the following aspects of the paper should be further emphasised to underline their importance:	
			a) That the effects of climate change are already being felt. Many scientific studies have detected with high confidence the contribution made by climate change to certain extreme weather events. Natural disaster losses in 2017 totalled USD 330 billion. It is highly probable that this figure was significantly augmented by anthropogenic climate change. That would mean that climate change has potentially already caused billions of dollars in losses. As the science of extreme weather event attribution improves, the dollar figure attributable to climate change may become increasingly quantifiable. We would refer you to:	This figure has been amended
			i. Sophie Marjanac & Lindene Patton (2018): Extreme weather event attribution science and climate change litigation: an essential step in the causal chain?, Journal of Energy & Natural Resources Law, DOI: 10.1080/02646811.2018.1451020; and	Will be added.
			ii. Explaining Extreme Events of 2015 from a Climate Perspective (2015 BAMS Report), published in December 2016	Will be added
			b) The pool of insurable assets will likely shrink with the increased prevalence of extreme weather events and sea level rise. This is already happening with respect to flood risks. If global warming continues on its present path, some markets could shrink to the point where certain lines of business are no longer viable. In conjunction with the excess of capital already seen in the insurance market, market conditions could continue to soften. This would put significant pressure on insurers and may fuel unsustainable underwriting practice.	Text added in P15b2 (“Market Risk”). Note on soft market conditions added in P16.
			c) Many insurers have very short strategic time horizons, often only twelve months into the future. Many supervisors also focus on insurers' ability to pay those claims likely to arise within a twelve month period. Insurers are therefore naturally disinclined to identify and manage long-term issues such as climate change. This may be further exacerbated by short-term employee incentives. This systemic issue is best addressed by regulators by ensuring insurers	Text has been amended to clarify that climate change is likely to present a long term strategic challenge for insurers, specifically in sections 3 and 4.

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			have viable long-term strategies. In addition, some topics were noticeably absent from the draft paper. These include the following: a) There is no mention of capital requirements and the green supporting factor which is currently being explored by the EU Commission and EIOPA. The discussion around the green supporting factor also raises alternatives such as a brown penalising factor which is a more risk-based approach. Adjusting capital requirements is clearly a way for insurance supervisors to manage the financial stability of the market. We were therefore surprised that this topic was not addressed in the paper. b) The paper should emphasise the considerable urgency surrounding this topic. The physical impacts of climate change are already affecting insurer's balance sheets. Assets are already being rendered uninsurable. This is a problem both for both insurance companies and consumers which both fall within the remit of regulators. Furthermore, achieving the goals of the Paris Agreement will require enormous shifts in capital within a very short timeframe. It is imperative that regulators act quickly to manage the enormous risks this poses to the sector. c) There is no commentary on prevailing market conditions. Many parts of the insurance industry are currently experiencing extremely soft market conditions. This is potentially restricting insurers' ability to price risks properly while remaining competitive. This could have serious consequences with regard to adequately managing so-called emerging risks like climate change. d) There is little discussion of the current climate science. It is vital that insurance supervisors and insurers engage with the most recent peer-reviewed scientific literature. This paper is the perfect opportunity to point the industry to reliable sources such as the IPCC. e) Beyond a brief comment in Table 1, the paper does not discuss the potential effects of climate change on consumers' access to insurance. Many consumers suffer severe and unexpected	Green supporting factor mentioned at end of sect 3.1.2 The paper has been revised to emphasise urgency of climate risks, including through additional quantitative examples. This is a generic issue and not specific to climate. No change needed. There is substantial reference to climate science. Addressed through protection gap discussion Added in to section 4

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			economic consequences if insurers i) deny coverage on the basis of exclusions that are difficult to understand, and/or ii) suddenly withdraw coverage due to changing climatic conditions. Insurers should be taking steps to educate their customers about climate risks. This could including details of how customers can bolster their climate resilience and retain access to insurance. In addition, we have some paragraph specific comments which we include below. We trust the IAIS will find the comments helpful and remain available to provide any clarification as needed.	
Institute of International Finance	Global	No	The Institute of International Finance appreciates the opportunity to comment to the IAIS, working together with the Sustainable Insurance Forum (SIF), on this Issues Paper on Climate Change Risk to the Insurance Sector. Insurers operate in the business of risk, and it is inherent to the insurance business model to adapt to a changing risk landscape. In this context, this issues paper, together with the work of the FSB Task Force on Climate-related Financial Disclosures (TCFD), serves as an important channel for dialogue on climate change risks. We appreciate the hard work that has gone into these projects, and we stand ready to provide further input from our global insurance membership. The IIF has been active in this area and has previously engaged regularly with the FSB TCFD in the development of their recommendations. For this consultation, we will be providing high-level general comments here, and look forward to the opportunity to engage further with the IAIS on future developments on this topic. As a general concept, we support the initiative of studying climate change risks and their impact on the insurance sector. We view this issues paper as a good start in laying out the status quo. If the IAIS conducts additional work in this area, we would suggest that sufficient time is taken to understand this range of issues more comprehensively before taking further action, whether in the form of a potential application paper, a set of best practices or supervisory guidance. The industry as well as the public sector over the years has done substantial work in knowledge-building, and we believe that this knowledge and experience can contribute greatly to IAIS work in this area. As a starting point, we urge the IAIS to provide channels for the industry to share information and contribute to the	Noted The purpose of this Issues Paper is to raise awareness for insurers and supervisors of the challenges presented by climate change and to share supervisory approaches used to address these risks. There may be additional work in follow-up of this paper. This will be considered as part of the development of the new Strategic Plan and Roadmap. There will be room for involvement by and engagement with (industry) stakeholders based on our stakeholder engagement policy.

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			topic of climate-related risks in order to build a solid knowledge base for regulators and supervisors, as well as for other stakeholders, including insurers, consumers, investors and other market participants. In addition, we note that this issues paper seems to go well beyond the scope of the FSB TCFD work. As mentioned above, we believe that there is a lot to be done to better understand climate change risks and the implications of climate risks that go beyond the insurance sector. As a result, efforts also should be well coordinated with other financial sectors. We would also like to comment on the implications of this work on the IAIS' overall work program. There are a number of important ongoing projects, including the development of ComFrame, the global Insurance Capital Standard (ICS) and the Activities-Based Approach to Systemic Risk (ABA). We believe that these efforts, together with the discussion of climate change, must be well prioritized to take account of available resources and timelines, to make sure the best outcome is achieved in an efficient manner. In terms of the process, we would like to get more clarity on the timeline and next steps on this project, as well as a better understanding of the IAIS' overall objectives in this area. As climate change is an important issue that has long-term implications for the insurance sector, the industry stands ready to engage on this project with experience and expertise. A clear timeline and roadmap going forward would greatly facilitate the collaboration. In conclusion, we appreciate the opportunity to contribute to this early IAIS work on climate change as it relates to insurance. If this work progresses, we urge the IAIS to take a step-by-step approach that takes into account current industry and regulatory experience on this topic more thoroughly before moving to the next step. We believe that any binding rules on climate change-related issues should be avoided. IIF and its members will continue to follow these developments closely and will stay actively engaged.	
The Geneva Association	International	No	RE: SIF/ IAIS Issues Paper on Climate Change Risks to the Insurance Sector	

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			Dear Jonathan, We would like to thank the International Association of Insurance Supervisors (IAIS) and the Sustainable Insurance Forum (SIF) for the opportunity to provide comments to the draft Issues Paper on Climate Change Risks to the Insurance Sector. The Geneva Association membership is committed to engage in a dialogue with the IAIS and SIF in order to contribute to discussions on the insurance standard-setting process. In this letter, instead of commenting on specific paragraphs, we have pointed out some general issues and considerations. Beyond that, we would like to provide some input to the wider discussion on climate risk and how it is currently emerging. The framing of climate risks under physical risk, liability risk and transition risk by the Financial Stability Board's Task Force on Climate-Related Financial Disclosures is enabling the integration of these emerging risks into mainstream corporate governance, strategy, investing and decision-making. Efforts are now increasingly evolving around the role of corporate policy and practice to measure, monitor and manage these risks. Other developments are focused on the acquisition of relevant analytical expertise and development of risk modelling and stress testing methodologies and tools. Finally, there is increasing attention to the need for implementation of recommendations of the FSB-TCFD to industrial actors to avail relevant data to enable investors, insurers and financial institutions to make "climate-informed" investment decisions. While there is work to be done, these are critical steps in the right direction. We would like to point to the changing landscape of physical risks (e.g. losses associated with extreme weather-related events) and efforts undertaken globally to address these. First, it is important to highlight that impacts of climate change vary region by region and by type of hazard. Second, we would like to note that while climate change leads to changes in loss patterns (through changing frequency and/ or severity of hazards), socio-economic factors such as population growth combined with construction practices and development patterns (e.g. rising urbanization and increasing	Noted. The text has been amended in several sections to reflect differentiation of physical risks, combinations of exposure factors, and the advance of the global disaster risk reduction movement.

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			concentration of people and assets in high risk areas) continue to be the primary driver of the changing loss patterns, due to increasing vulnerability and exposures. This is not sufficiently emphasized in the draft Issues Paper. Third, we would like to raise your attention to the global movement on disaster risk reduction and transfer which started in early 2000 and the emerging landscape of public-private partnerships (PPPs) aiming to reduce the socio-economic impacts of physical climate risks. Different countries are at different stages of adoption and implementation of such measures. Governments are increasingly making use of risk-based approaches to disaster and climate-risk management. Consequently, we observe growing levels of public and private investments in measures to reduce existing and prevent new risks, such as pro-active risk financing and various risk transfer measures, combined with various climate adaptation efforts. These developments should be taken into account in the draft Issues Paper. It is important to note that measures to reduce risks and prevent new risks are important to ensure that consumers, businesses and governments maintain the capacity to pay for consequences of the residual physical risks, through relevant risk financing and risk transfer measures. The abovementioned developments should be considered and understood. We also believe that the IAIS and its members, as insurance and risk specialists in the government systems, are in a unique position to act as catalysts to raise awareness among governments and consumers to the importance of investing in these risk reduction and preventive measures, for building socio-economic resilience to physical risks. In addition, since 2015, an increasing number of governments, central banks, regulators and financial sector stakeholders are working to drive climate risks and sustainability into the core of the financial system - as a way to increase awareness and visibility of emerging risks, embrace cooperation, attract investment and drive policy coherence across economic and financial frameworks for a well-planned and informed transition to a low-carbon and resilient economy. Currently, a number of countries have set out strategic roadmaps and are considering policy frameworks for sustainable	 Text has been added governments using risk-based approaches to disaster and climate risk management, growing public and private investments, proactive risk reduction investments and risk transfer measures. Text on national initiatives has been added to the introduction.

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			finance - e.g., Argentina, France, Italy, the Netherlands, Singapore, Sweden and Canada. The latter has just started these discussions. Other critical initiatives are: the European Commission's High-Level Expert Group on Sustainable Finance recommendations on Financing a Sustainable European Economy, in which climate risk is a major consideration, similar initiatives of the G20, G7, APEC and ASEAN platforms, as well as activities of international rating agencies such as Standard & Poor's and Moody's in incorporating climate risks in company, sovereign and municipal credit ratings. These all aim to bring coherence and minimize risks towards achieving the goals of the 2 degree scenario. It is crucial that stakeholders have a good understanding of the implications of such developments. Finally, through the Global Framework for Climate Services, led by the United Nations' World Meteorological Organization, the publicly-funded scientific community responsible for collecting data, climate modeling and forecasting is increasingly being supported by the governments to develop national climate services. The main goal is to provide more reliable access to climate data, research, forecasts and climate scenarios to the users. Availability of and accessibility to high quality climate information is critical to improving CAT and climate risk modeling, stress testing and loss scenarios analysis. These initiatives are providing the insurance sector with the opportunity to work with the scientific community on the requirements for data quality, improve the way physical risks are captured in the climate change models and how these are interfaced with financial and asset risk models. Building on three decades of catastrophe risk modeling and risk pricing, stress testing, research and underwriting, the insurance industry offers a unique skillset in helping governments and other stakeholders, to build financial resilience to physical risks of climate change and closing the natural catastrophe protection gap. This is at the core of the Geneva Association's extreme events and climate risk work stream. Specifically, the following Geneva Association reports provide information on latest developments, concrete examples and initiatives for your consideration:	Text on the EU Action Plan has been added to the introduction. Noted. Text has been added to section 4. Several of these papers have been referenced.

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			- An Integrated Approach to Managing Extreme Events and Climate Risks (2016): Towards a Concerted Public-Private Approach - The Stakeholder Landscape in Extreme Events and Climate Risk Management (2017) - National Risk Assessment Guidelines For Sovereign Risk Financing and Insurance (2017) (A joint report of Geneva Association and the Insurance Development Forum, with the United Nations) The Geneva Association is also working with the insurance industry to explore risks and opportunities in the area of climate risk and investing. Specifically, through this work, we are working not only to raise awareness about the risks and how the industry is addressing them; but also to highlight the opportunities and challenges facing the industry in supporting societal resilience to climate change and the transitioning to a low carbon economy. We kindly offer the Geneva Association's latest publication, \`Climate Change and the Insurance Industry: Taking Action as Risk Managers and Investors.' Against this background, we appreciate the efforts of the IAIS to put climate risk to the insurance sector on the agenda in an Issues Paper. We note that Issues Papers are primarily descriptive and not meant to create expectations on how supervisors should implement supervisory material. However, Issues Papers often form part of the preparatory work for developing standards and may contain recommendations for future work by the IAIS. In our view, it is sound to analyze climate risk to the insurance sector as an emerging risk and to do so in such a descriptive way as it is done. Specifically, we note the references in the issues paper to the climate change as a systemic risk, for example in paras 21, 31 and 244. The link between climate risk and financial stability, however, is not clear, and we doubt that climate change per se would raise financial stability concerns. The relevant insurance contracts are generally annual in term, not least in relation to physical climate risk, and the insurers have a variety of tools to monitor and manage the risks, for example to review the underwriting terms at the time of the renewal and by utilizing a variety of loss mitigation schemes. Therefore, consideration of climate change as a systemic risk for the insurers would require careful analysis, supported by clear evidence	Text amended throughout.

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			and rationales. At least any financial stability concerns should be labelled "potential". We do support the IAIS and SIF in preparing for possible initiatives by considering climate risk to insurers in the general framework for risk assessment and to carefully evaluate to which extent existing regulation - like ICPs - can already be interpreted to take account of climate risk. It is important that capital allocation decisions continue to be based on stated risk and return objectives in the interests of policyholders. Shutting of certain industries to the capital markets could actually hinder the transition to a green economy. As a general principle, we believe that incentives are more effective than increased regulation. In this context, capital charges for qualified investments should be considered. The present framework may need some adaptation in light of the time horizon of climate risk. As an example, stress tests may need some adaptation. If the IAIS and the SIF, going forward and in consultation with the FSB, would find it appropriate to consider further standard-setting material, we would recommend that the IAIS and SIF would begin the effort with an Application Paper to first establish a baseline. The paper refers to the Recommendations and Guidance of the FSB Task Force on Climate Related Financial Disclosures (TCFD). As much as we think the TCFD and involved industry stakeholders, including insurers, did excellent work in providing the guidance, we would like to stress that this is voluntary. We would like to highlight that recommendations should lead to a certain level of harmonization which evolves over time as the industry gets more experience. We therefore agree with the IAIS and SIF to keep the level of prescriptiveness to a minimum. We also would like to offer updated data for 2017, based on input from one of our members, Munich Re. On Page 9, Box1: US$138 billion (instead of US$135) insured loss (row 4), US$340 billion instead of US$330 billion (row 5). Furthermore, in the last sentence of that box it remains unclear whether the wildfire losses in California	New data added to Box 1.

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			refer to economic or insured losses. However, the $10 billion are not right anymore, there are US$17 billion economic, and US$13 billion insured losses, respectively. A slide of weather-related loss events worldwide 1980 - 2017, both uninsured and insured losses, with 5-year moving average was submitted by e-mail to Jonathan Dixon, along with this response letter. The Geneva Association is keen on continuing the dialogue and cooperation with the IAIS and SIF and to provide more background information on the work being undertaken within the Extreme Events & Climate Risk work stream of The Geneva Association. Should you have any questions on the issues raised in this letter, do not hesitate to contact: Peter Skjoedt (peter_skjoedt@genevaassociation.org), Maryam Golnaraghi (Maryam_golnaraghi@genevaassociation.org), or Dennis Noordhoek (dennis_noordhoek@genevaassociation.org) Yours sincerely, Anna Maria D'Hulster Secretary General	
General Insurance Association of Japan	Japan	No	We, the General Insurance Association of Japan, are grateful for this opportunity to comment on the Draft Issues Paper on Climate Change Risks to The Insurance Sector (hereinafter referred to as "IP"). We agree with the objectives of the IP to raise awareness for insurers and supervisors of the challenges presented by climate change. On the other hand, we understand that discussions on how to deal with climate change are still at an early stage. Therefore, we would like to stress that in finalizing the IP (as well as in developing possible Standards if a decision is made to develop them), we believe that the IAIS should duly take into account the characteristics of different financial/insurance markets, their geographical	Noted.

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			environments and energy policies so that the IP and Standards will be implementable by more jurisdictions. We also would like to stress the importance of the IAIS carefully considering the opinions of private insurance companies that may be subject to regulation and supervision. We think that due consideration should be given to ensure that the IP will not cause unintended effects. For instance, we believe that in-depth discussions should be had not only from the limited viewpoint of insurance regulation and supervision, but also from broader perspectives including interactions with markets and the real economy, effects on broader economic activities, and the consistency with initiatives being considered for the banking and securities industries. Additionally, it should be noted that the existing TCFD framework consists of "recommendations for disclosure of information" and that they do not necessarily pose requirements on insurers to disclose information on loans/investments and the underwriting of companies related to fossil fuel energy across the board. Although climate change is referred to as a systemic risk in several parts of the IP (paragraphs 21, 31, and 244), we do not believe that it leads immediately to systemic risk for insurance companies at present. Insurance companies manage risks by reviewing underwriting terms at the time of contract renewal, and by utilizing loss mitigation schemes such as purchasing reinsurance. While climate change will greatly and directly affect insurance risks in the underwriting business due to the increase in frequency and strength of natural catastrophes, it is said to be difficult to discern whether or not each climate event is derived from climate change due to its physical impact being observed as a long-term trend in units of several decades. Moreover, as is also the case for other risks (market, strategic, investment, operational, and reputational), it is too early to refer to them as systemic without showing the type of risks and the transmission channels of their spillover more specifically. Therefore, we trust that hereafter, when climate change is referred to as systemic risk, careful debates will be held by presenting grounds for arguments and providing proper reference to the grounds for making each argument.	Text has been amended. For the purpose of this paper to raise awareness, such

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			In the context of transition risks, the term "high carbon assets risk", is used in some parts of the IP (paragraphs 31 and 84). However, unless the definition of the "high carbon" sector is clarified, using such a loose term, which seems to recommend adopting a specific index as a method to assess these assets, should be avoided as it is likely to cause misunderstanding.	clarification not considered necessary.
Zurich Insurance Company Ltd.	Switzerland	No	Believing that climate change represents one of the most complex risks facing society today we welcome the IAIS' aim to create a common understanding of the issue and current practices in the insurance sector through a dedicated Issues Paper. We have carefully reviewed the paper and find it to be a helpful document that captures our own experience and understanding well. We have only identified a few specific issues for your consideration. We are convinced that the insurance sector has an important role to play when it comes to climate change, first and foremost by conducting business informed by a thorough understanding of the risks and opportunities associated with it. Continuously fostering that understanding, and integrating it into our business and risk management practices, is a priority for Zurich - but not one that can be easily or quickly achieved. While we are thus supportive of capturing climate risk through existing frameworks and processes, such as selected Insurance Core Principles or Emerging Risk frameworks as laid out in the Issues Paper, we trust that the IAIS and its members will adequately acknowledge in the evolution of their practices: (1) the inherent complexities in quantifying climate change risks; (2) the dependence on hard-to-predict policy decisions; and (3) the long-term nature of the issue. In our view, these challenges are best overcome by an active and continuous dialogue between policymakers, supervisors, industry participants and other relevant stakeholders. Zurich supports and engages in such dialogues, directly or through relevant associations (see https://www.zurich.com/en/corporate-responsibility/climate-change); and we stand ready to support and engage in dialogues with the IAIS.	Noted.
ICMIF	UK	No	ICMIF welcomes the opportunity to share some general comments on the joint SIF/ IAIS Issues Paper on Climate Change Risks to the	It is part of the IAIS's strategy following from its Mission to inform its Members of relevant developments affecting the

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			Insurance Sector. We agree with the objectives of the Paper, i.e. to raise awareness for insurers and supervisors of the challenges presented by climate change, including current and contemplated supervisory approaches for addressing these risks. That said the last paragraph of the paper, starting with 243 is a cause for concern for our members, in particular regarding the IAIS' possible new mandate in addressing climate risk. We appreciate that regulation is not the only, and most probably not the most adequate response to the issue of climate change. As a start we would suggest assessing new prudential and regulatory proposals against measures already taken by jurisdictions to tackle climate risk policy objectives. Then, as for the post-crisis regulatory reforms, we would call for an evaluation of the potential unintended consequences on insurers' products and investment capabilities. We fear that any increase in the current cost of regulation and supervision, even for such noble causes as the protection of the people and the planet, would have dire consequences for a large segment of the insurance sector, in particular the small and medium sized insurers. We therefore invite the IAIS to consider sustainability in its full breadth, i.e. the environmental criteria (including but not limited to climate change criteria), the social and the governance criteria. It may be useful to remember that, just as an ecosystem benefits from diversity, so the financial sector is better off with diverse and numerous corporate forms, from both a financial stability and consumer protection angle. We thus ask that any new rules imposed on SME insurers be weighed against a comprehensive sustainability criterion.	industry and its supervision. Raising awareness on climate change risks fits into this current strategy the more so since the related risks (physical, transition, liability) have a linkage with insurance business. We have amended relevant sections of the text to respect priorities of proportionality, including that smaller firms may be challenged in their efforts to understand and build resilience to climate risks
Lloyd's of London	UK	No	This is a response on behalf of Lloyd's. Lloyd's is a society of members that operates as an insurance and reinsurance market in London, UK. We welcome the opportunity to comment on this draft Issues Paper. The Lloyd's market provides insurance cover against the risks of climate-related loss and damage, so we are very interested in the topic of climate change. Developing a better understanding of the world is important to the management and mitigation of risk and Lloyd's is active in commissioning research and publishing reports on the consequences of climate change and other emerging risks. We believe that it is important that supervisors, insurance	Noted.

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			undertakings and others in the global insurance market have a good understanding of the nature and scale of the risks arising from climate change and we therefore support the work that the IAIS proposes to carry out on this subject.	
Association of British Insurers	United Kingdom	No	The Association of British Insurers (ABI) welcomes the opportunity to comment on this Issues Paper from the IAIS. Insurance is among the industries being most affected by climate change, due to what it insures and what it invests its assets in. Consequently, (re)insurers are keen to contribute to the mitigation of, and adaptation to, the risks associated with climate change globally. However, a coordinated response is required across the financial system. Therefore, we take note of the IAIS steps taken to develop a better understanding of the risks posed by climate change, to complement the jurisdictional responses to mitigate risks caused by climate change. However, when making recommendations, the IAIS must consider the potential for negative impacts of any measures on the wider financial system, as well as the potential unintended consequences of proposals on insurers' product offerings and investment. Any attempt to develop coordination amongst supervisors requires careful consideration given the absence of a common taxonomy which defines, measures and articulates the risks from climate change; the inconsistent understanding of the key issues driving the risk profiles; and the potential need to provide mitigation. Consideration must also be given to the principle of proportionality, ensuring that smaller firms are able to adjust to any additional requirements. Jurisdiction-specific circumstances should also be taken into account. Any new regulatory/ prudential proposals should be assessed against existing jurisdictional measures that already meet climate risk policy objectives. Given that each jurisdiction will be affected differently by climate risks, we believe that overly-	Noted. Noted, considerations such as mentioned in the comment (proportionality, jurisdictional circumstances) are fair but fit more in a paper providing guidance such as Application paper.

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			prescriptive responses are likely to be inappropriate. We would also add that this paper would benefit from better distinguishing between primary insurers and reinsurers. Differences in materiality, risk and knowledge should be reflected in any approach taken. Finally, we would add that a more detailed assessment of the outcomes of the different regulatory approaches being taken would also be helpful.	Has been reviewed. Does not fit well with this paper. Examples have been added not as recommended practice but as a response observed.
BJD Reinsurance Consulting, LLC	United States	No	Thanks for the draft and congratulations for the consultative paper. Public Insurance Gap. Sovereign insurance. Governments going insured into the private sector. In clear words this has to be mentioned. Data and analysis of exposure of public goods, assets and services to the impacts of climate change is not a "nice to have" but a "must have". Everywhere. Starting with USA, Japan, China, Mexico, Italy, Taiwan, Turkey, Philippines, Indonesia, Germany, Canada, India, Chile, and so on (Source Swiss Re) countries where more 80% of the annual damages out of the over 100 billion USD in average per year are uninsured public goods, assets and services. Cf. para. 88 & 89.	Comments have been noted but do not necessitate a change to the paper.
PCI	United States	No	The American Insurance Association (AIA) and the Property Casualty Insurers Association of America (PCI) welcome the opportunity to consider the effect of environmental changes to the insurance sector, and we look forward to continuing to work with the International Association of Insurance Supervisors (IAIS) and other organizations on this important topic. We support the approach taken in the Draft of considering climate-related risks holistically across the spectrum of insured risks rather than as a separate set of risks. As the risk sharing and risk mitigation industry, we believe we have an important role to play in responding to climate risks. But that role must be placed in the context of the critical roles of government	Noted.

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			and other sectors in mitigation and adaptation and in making risks more insurable and affordable. The work of the OECD on natural disaster risk is a good example of this holistic approach that should be adopted by IAIS. Though the Draft does not explicitly endorse government mandates for insurers, we would urge the IAIS and SIF to avoid endorsing mandates as this project proceeds. Rules or mandates related to investment decisions may have unintended consequences, and the primary goal of insurer-owned investments must be to meet the obligations of the insurer. Making investment decisions that are not based upon the strength of the investment could create solvency concerns. For example, requirements related to investments could cause more direct harm to insurer portfolios than any potential harm based on the future impact of climate factors on market values. We also encourage the IAIS and the SIF to strengthen the Draft by recognizing the substantial and largely successful efforts that are continuously undertaken by insurers and reinsurers to respond to climate risks, and to include additional supporting material for many of the assertions in the paper. For example, at the same time that climate risks have grown, the policyholder surplus of U.S. property and casualty insurers has grown and reached an all-time high in 2017 (Deloitte Center for Financial Services, 2018 Insurance Outlook). Similarly, the global reinsurance industry has an overabundance of capital. Those developments - occurring in tandem with changes in climate risks - suggest that the industry is reacting to climate risks in an appropriate manner. Views such as those from Moody's Investor Service should also be included, which are that the risks to property and casualty insurers' investment portfolios from climate events currently are relatively small "given P&C (re)insurers' low asset leverage and well diversified investment portfolios." We suggest the paper should take more account of the importance of risk-based pricing and how existing regulatory standards, regulators and insurers already consider relevant and material risks. We would also suggest that the Draft include more information on the growing use of data analytics and technology that will enhance the resiliency of insurers and many of their policyholders in coming	Text has been added on initiatives by the insurance industry. Not considered necessary

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			years. Due to the complexity of the issue and the diversity of opinions, more time should be provided to respond to papers and a much more fulsome dialogue should occur. Finally, while the Draft does briefly recognize the importance of the global reinsurance for modeling risks, we believe that the paper should more strongly point out the importance of the global reinsurance industry for geographically diversifying risks and for recovering from events. It should recommend that regulators and governments avoid implementing barriers to cross-border reinsurance given the importance of cross-border reinsurance for responding to climate risks. Any examination of the relevance of climate risks to the insurance sector would be incomplete without a thorough explanation of the importance of cross-border reinsurance in sharing of recovery costs from climate-related events and the implementation of global best practices to mitigate risks. Diversifying risks globally and implementing the best mitigation practices are key to responding to climate-related risks.	Text added on the role of reinsurance.
Cincinnati Insurance Company	United States of America	No	The IAIS now enters the controversial field of climate change with its "Issues Paper On Climate Change Risks To The Insurance Sector." The IAIS claims that the objectives of this Issues Paper are 1) to raise awareness for insurers and supervisors of the challenges presented by climate change, including current and contemplated supervisory approaches for addressing these risks; 2) shed light on the need for additional, more specific joint material from the IAIS on climate change; and 3) to possibly develop a guidance document on climate change and insurance supervision. Since Issues Papers often form part of the preparatory work for developing standards and may contain recommendations for future work by the IAIS, this paper could result in the creation of a new set of Insurance Core Principles (ICPs) on climate change. Our company does not believe that the world needs a set of Insurance Core Principles (ICPs) and objects to the program under which the International Monetary Fund (IMF) grades the U.S. insurance regulatory system on its compliance with	Disagree.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			the ICPs. The core principles upon which the U.S. insurance regulatory system is premised have functioned perfectly for over 150 years and do not need an overhaul by the International Association of Insurance Supervisors (IAIS) or by its ostensible parent organization, the Financial Stability Board (FSB). Therefore, we object to the IAIS conducting any work that may lead to the promulgation of ICPs on climate change and would suggest that the Issues Paper be withdrawn. There is no need for the IAIS to craft a new international insurance code on climate change. The U.S. and other regulatory regimes are capable of handling these issues themselves. Given the substance of this comment (the Issues Paper on climate change should be withdrawn), we see no need to answer Q2 through Q356.	
American Academy of Actuaries	USA	No	April 27, 2018 Mr. Jonathon Dixon Secretary General International Association of Insurance Supervisors c/o Bank for International Settlements CH-4002 Basel Switzerland Re: Issues Paper on Climate Change Risks to the Insurance Sector Dear Secretary General Dixon, On behalf of the American Academy of Actuaries, I appreciate the opportunity to provide comments on the International Association of Insurance Supervisors' (IAIS) recent public consultation on the draft issues paper on climate change risks to the insurance sector, dated Mar. 3, 2018. The Actuaries Climate Index (ACI) and the Actuaries Climate Risk Index (ACRI) are the products of a research project jointly funded by the American Academy of Actuaries (USA), the Casualty Actuarial Society (USA), the Canadian Institute of Actuaries, and the Society of Actuaries (USA). Both the ACI and, especially, the ACRI, might be useful to both regulators and industry in identifying and managing some of the risks discussed in the issue brief.	Noted.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			The Actuaries Climate Index (ACI) was launched in November 2016. It is intended to provide a useful monitoring tool–an objective indicator of the frequency of extreme weather and the extent of sea level change. The ACI website, http://www.actuariesclimateindex.org, presents the ACI for the United States and Canada and 12 subregions thereof. Updates are released quarterly, when analysis of data for each meteorological season is complete. The six components of the Actuaries Climate Index are: 1. High temperatures; 2. Low temperatures; 3. Heavy rainfall; 4. Drought (consecutive dry days); 5. High wind; and 6. Sea level. The ACI does not address causes nor the likely impact of climate change, and it does not provide projections of future climate change nor future effects. The ACI website does provide graphics and data for download. Since launch, more than 29,000 visitor sessions from 134 countries have been tracked, and more than 2,100 data downloads have been made. Actuaries are experienced in the assessment and mitigation of the financial consequences of risks and in the presentation of complex data. In keeping with this expertise, the second phase of the research project is the Actuaries Climate Risk Index™, which assesses the potential risk management implications presented by the changes measured by the ACI. The risk index, due to be launched by the end of 2018, will be based on the historical correlations of economic losses, mortality, and injuries to the Actuaries Climate Index data. The goals of the Actuaries Climate Index (ACI) and the Actuaries Climate Risk Index (ACRI) are to: - Create indices that reflect an actuarial perspective, are objective, and are easy to understand without being overly simplistic; - Create one index that measures changes in climate extremes, and a second index that relates those climate extremes to economic and	

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			human losses; - Use the indices to inform policymakers, insurance professionals, and the general public on the incidence and impact of extreme events; - Promote the actuarial profession by contributing constructively to the climate change debate. We believe that both the ACI and the ACRI might be useful to insurance supervisors, the insurance industry and the public as they each seek to manage the risks associated with climate change. Thank you for this opportunity to provide our views on the draft issues paper on climate change risks to the insurance sector. If you have any questions or would like to discuss this letter in more detail, please contact Marc Rosenberg, the Academy's senior policy analyst for casualty issues, at +1-202-223-8196 or rosenberg@actuary.org. Sincerely, Kevin M. Ryan, MAAA, FCAS Senior Casualty Fellow Casualty Practice Council American Academy of Actuaries	
American Insurance Association	USA	No	The American Insurance Association (AIA) and the Property Casualty Insurers Association of America (PCI) welcome the opportunity to consider the effect of environmental changes to the insurance sector, and we look forward to continuing to work with the International Association of Insurance Supervisors (IAIS) and other organizations on this important topic. We support the approach taken in the Draft of considering climate-related risks holistically across the spectrum of insured risks rather than as a separate set of risks. As the risk sharing and risk mitigation industry, we believe we have an important role to play in responding to climate risks. But that role must be placed in the context of the critical roles of government and other sectors in mitigation and adaptation and in making risks more insurable and affordable. The work of the OECD on natural disaster risk is a good example of this holistic approach that should be adopted by IAIS.	See response to comment from the PCI (above).

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			Though the Draft does not explicitly endorse government mandates for insurers, we would urge the IAIS and SIF to avoid endorsing mandates as this project proceeds. Rules or mandates related to investment decisions may have unintended consequences, and the primary goal of insurer-owned investments must be to meet the obligations of the insurer. Making investment decisions that are not based upon the strength of the investment could create solvency concerns. For example, requirements related to investments could cause more direct harm to insurer portfolios than any potential harm based on the future impact of climate factors on market values. We also encourage the IAIS and the SIF to strengthen the Draft by recognizing the substantial and largely successful efforts that are continuously undertaken by insurers and reinsurers to respond to climate risks, and to include additional supporting material for many of the assertions in the paper. For example, at the same time that climate risks have grown, the policyholder surplus of U.S. property and casualty insurers has grown and reached an all-time high in 2017 (Deloitte Center for Financial Services, 2018 Insurance Outlook). Similarly, the global reinsurance industry has an overabundance of capital. Those developments - occurring in tandem with changes in climate risks - suggest that the industry is reacting to climate risks in an appropriate manner. Views such as those from Moody's Investor Service should also be included, which are that the risks to property and casualty insurers' investment portfolios from climate events currently are relatively small "given P&C (re)insurers´ low asset leverage and well diversified investment portfolios." We suggest the paper should take more account of the importance of risk-based pricing and how existing regulatory standards, regulators and insurers already consider relevant and material risks. We would also suggest that the Draft include more information on the growing use of data analytics and technology that will enhance the resiliency of insurers and many of their policyholders in coming years. Due to the complexity of the issue and the diversity of opinions, more time should be provided to respond to papers and a much	

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			more fulsome dialogue should occur. Finally, while the Draft does briefly recognize the importance of the global reinsurance for modeling risks, we believe that the paper should more strongly point out the importance of the global reinsurance industry for geographically diversifying risks and for recovering from events. It should recommend that regulators and governments avoid implementing barriers to cross-border reinsurance given the importance of cross-border reinsurance for responding to climate risks. Any examination of the relevance of climate risks to the insurance sector would be incomplete without a thorough explanation of the importance of cross-border reinsurance in sharing of recovery costs from climate-related events and the implementation of global best practices to mitigate risks. Diversifying risks globally and implementing the best mitigation practices are key to responding to climate-related risks.	
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	As an Issues Paper is not meant to create supervisory expectations, suggest a review of the paper with this in mind, especially with respect to Section 6. For example, text in paragraph 42 and 46 could be read as setting expectations for the insurer/supervisor.	This section seeks to explain how the ICPs may be relevant, and is not intended to create expectations
OK - Oklahoma Department of Insurance	USA, Oklahoma	No	The Oklahoma Insurance Department along with our peers in Montana strongly reject the underlying notion that fossil fuel companies pose a financial risk to the insurance sector. More edits are necessary for this report but given the short time to reply, we would like to primarily address the inconsistency of an "Issues Paper" that specifically is intended to be "descriptive and not meant to create expectations on how supervisors should implement supervisory material". Rather, the Issues Paper currently in front of us concludes with a litany of strongly worded recommendations that more closely take the form of soft mandates for regulators, organizations and insurers. The IAIS should refrain from the temptation to dictate to insurers how to respond to this reports' partisan view of climate change. A more balanced view of the effects of climate change is necessary for the market to accurately price the risk. It's our strong belief that risks are best priced, sold and purchased by market forces without the interference of regulators in	Noted. The IAIS believes, based on analytical and scientific work accepted by international organisations and other bodies, that there are reasons for the insurance industry and insurance supervisors to seriously consider the impacts of climate change risk to insurance business. This is described in the introduction and sections 2 and 3 of the paper.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			the United States or around the world. Questions about how to run and operate the business should reside with the board of directors, shareholders and officers. Recognizing risks followed by pricing said risk is tantamount to the foundations of the insurance industry. Telling insurance carriers how they should identify and respond to emerging risks ignores the pillars of insurance which is centered on identifying risk that exists in the market. The section "Recommendations of the FSB TCFD" that specifically guides "Insurers and Asset Owners" should be stricken in its entirety. Allow market forces to exist where risk exists. Especially related to the power of regulators or regulatory bodies, abstemiousness should be the focus. Sincerely, John D. Doak Oklahoma Insurance Commissioner	
IAA Resource and Environment Working Group	Canada	No	**GENERAL COMMENTS** *1.* First and foremost, we commend the IAIS on undertaking the preparation of this draft issues paper. It should prove to be an excellent resource to local supervisors to enhance their risk-based supervision of the industry. Particular benefits will be derived from the case studies included. *2.* As this is an evolving area, we believe it appropriate for the resulting issues paper to be re-assessed on a periodic basis, e.g., every three years. First, in reaction to evolving knowledge of climate change (e.g., the next scheduled IPCC reports are due in 2021 and 2022) and potential damages, but most importantly because relevant case studies will be expanding, with more lessons learned over time. *3.* Despite the insurance industry and regulators' historical interest in promoting the development of strong land-use planning and building codes to mitigate against property insurance losses, there is no mention in the report of the need for action to strengthen those codes in order to *anticipate* the effects of future climate change (thus mitigating insurance risk exposure to extreme events). An obvious example is the need to require building elevation on the coast at a higher level than is indicated by current conditions, so as to	Noted Considered to be out of scope for this paper. Text on poleward migration added to P11b1.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			anticipate rising sea levels. Another is the need to consider poleward migration of tropical cyclones, such as by revisiting wind and other requirements in coastal cities such as Brisbane and New York City. *4.* Most of the transition risks cited focus on assets/investments involved in fossil fuels. Not mentioned is the problem of real estate or infrastructure assets becoming of significantly less value in high-risk areas due to climate and sea-level changes and the possible unaffordability of insurance, with the knock-on effect in some cases of mortgage lender problems. In the U.S. National Flood Insurance Program alone, over US$600 billion of property within one mile of the beach in the U.S. (storm surge is covered) is covered, much of which will not be viable in coming decades, absent intensive adaptation investments. Coastal infrastructure assets and related investments may also be at risk to varying degrees as a result of adaptation costs, and/or restrictions to insurability or utilization. *5.* The risk of significant litigations against emitters is briefly mentioned in the paper. This process has yet to work through the world's legal systems, but has the potential to be very important in the future progression of liability insurance claims. The IAIS may wish to consider developing (a) sample guidance on stress tests around this issue, and (b) ongoing global surveillance of such liability outcomes. *6.* Although mentioned in the draft issues paper, opportunities to provide coverage to those consumers most likely to need consumer protection should be given greater emphasis. *7.* Greater transparency may be needed on warnings about renewability and affordability to enable individuals to make decisions in a prudent, well-informed manner. *8.* Paragraph 66 indicates that supervisory authorities and policymakers have an important role in identifying and mitigating climate-related risks. It would be appropriate to expand this discussion of the role of supervisors (as well as insurance companies) in the mitigation of these risks. Included would be the improvement of the general resilience of structures (real estate and mortgage loans) and more intelligent land use. In addition, the national supervisory framework should be compatible with, and support to the extent practical, their nationally determined commitments. Therefore, we believe that the promotion of these aims and practical collaboration (including clear-cut sets of appropriate responsibilities) with others in government, industry and	Text on uninsurability due to physical risks added to section 3.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			professionals are of great importance. *9.* In addition to the publication of this issues paper, we encourage the IAIS to provide continuing education opportunities to national supervisory staff, as appropriate, addressing the issues raised in this paper. *10.* We believe that it would be appropriate to point out that other relevant risk issues are directly related to the drivers and effects of climate change. Two examples follow. Flood risk is an insurance peril that can result from the combined effects of greenhouse gas emissions and climate factors. Air pollution can be exacerbated by the fundamental causes of climate change and can have significant effects on several types of insurance coverages, including life and health insurance.	
2 - Q2 Comment on the List of Acronyms				
ICMIF	UK	No	We suggest adding the following organisations: UNDP (United Nations Development Programme) for its work on disaster risk insurance; IDF (Insurance Development Forum) and ICLE (Local Governments for Sustainability), the main global network of more than 1,500 cities, towns and regions committed to building a sustainable future.	Noted.
3 - Q3 General comment on Section 1				
Association of Bermuda Insurers and Reinsurers	Bermuda	No	For perils where there is a clear indication that risk will go up as a result of global warming (e.g. flood risk, wildfires), the benefits of shifting these risks from the public-sector entities to the private market should be emphasized. Extreme sea level rise is a prime example of an underappreciated risk that the private market is willing and able to assume as this would provide significant savings to public sector entities and governments in years with outsized loss activity. This will enable local economies to recover more quickly, provide governments with enhanced flexibility to finance economic and social development, build infrastructure and reduce likelihood of increased taxation as a result of catastrophic events. During 2017 there was a significant amount of CAT events where there were links to climate change such as the California Wildfires which were caused by "rising temperatures (Partially due to climate change) and recent droughts up through 2016 set the background state for the fire season". Focusing on specific perils like wildfire, flood etc. where	Disagree. The IAIS does not take a position how risk allocation should take place.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			research is less murky in terms of the connection between climate change and increased frequency, would help policy makers focus better and allow for more meaningful incremental steps in the insurance industry.	
ICMIF	UK	No	In our opinion, this section provides a good historical perspective of the milestones achieved since 2015.	Noted
4 - Q4 Comment on Paragraph 1				
Association of Bermuda Insurers and Reinsurers	Bermuda	No	The sentence" increasing frequency and severity of natural catastrophes" should be more nuanced as there is less of a correlation between a globally warmed world and hurricanes, severe cyclonic storms and windstorms as there is with storm surge and rain-induced flood. The Intergovernmental Panel on Climate Change report on this topic had little to say about natural catastrophes as there isn't consensus for a majority of perils.	This nuance is addressed in the main text in section 2.1, as it would not be appropriate to have a lengthy discussion of climate factor correlation in paragraph 1 as suggested by the reviewer (considering it is introductory material).
ClientEarth	Global	No	As mentioned above, climate change is not just a threat. It is potentially already having a profound impact on insurers and their balance sheets. The paper should take care not to paint climate change as a future threat only.	Paragraph has been amended to: “Climate change is recognized by the world’s governments, the private sector, and civil society as a top global threat, which is having impacts today on human, environmental, and economic systems – including, for instance, through an increasing frequency and severity of natural catastrophes and extreme weather events. Society’s responses to climate change – including new policies, market dynamics, technological innovation, and social change – may have wide-ranging impacts on the structure and function of the global economy.”
5 - Q5 Comment on Paragraph 2				
IAA Resource and Environment Working Group	Canada	No	First bullet – it isn’t binding. Second bullet – the IAIS might consider development of a model regulatory approach for disclosure in regulatory financial statements, something similar to the TCFD recommendations given in the Appendix.	First bullet amended. Second bullet: noted
6 - Q6 Comment on Paragraph 3				

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
ICMIF	UK	No	We welcome the cooperation agreement signed by the IAIS and UNEP within the Sustainable Insurance Forum for Supervisors and hope this platform will uphold the essential role of insurance in increasing the resilience of individuals and societies with international policymakers.	Noted
11 - Q11 Comment on Paragraph 8				
ClientEarth	Global	No	Climate change is a global challenge which needs to be addressed at a global level. The paper clearly shows that there is a need for further international collaboration on the issue of climate change. It would therefore seem clear that there will be scope for further action by the IAIS on this topic. It would be helpful if the paper set out i) the process for commissioning an Applications Paper, and ii) some potential topics for that paper.	It is beyond the scope of an issues paper to address the process and topics of an applications paper. Such an action would need to be endorsed by the IAIS for advancement.
16 - Q16 Comment on Paragraph 11				
Association of Bermuda Insurers and Reinsurers	Bermuda	No	Although there is some truth in the statement "Research suggests that 80% of natural disasters between 2005 to 2015 were climate-related" the tone does not match or represent the state of science. It reads that climate change caused or significantly enhanced 80% of the natural disasters during the decade which is not scientifically accurate. The study linking cat 4 and cat 5 rates to increases in temperature does not represent the consensus in the scientific community and even the authors of the paper do not suggest that the diagnosed rate of change will persist. Although it is important to motivate action, it is also of importance to maintain a "level-head' about the risks of climate change rather than be overly reactionary to headlines and individual scientific publications. Unintended consequences from policy makers over reacting is not beneficial while the scientific data (in particular the connection between some natural disasters and climate change) is still inconclusive.	Text in P11b1 regarding links between climate change and natural catastrophes has been amended.
WWF	Switzerland	No	On the Climate Impacts paragraph, we would elaborate more on impact for Biodiversity by showcasing the impacts on Marine ecosystems and Corals. Climare change poses major threats to Marine ecosystems and especially corals. A new study* shows that because of climate change, the world's reefs will start suffering annual bleaching in 2043. About 5 per cent of them will be hit a decade or more earlier, while about 11 per cent will suffer annual	Text in P11b3 has been amended to reference coral reefs.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			bleaching a decade or more later than this date. Reefs are home to at least one quarter of all marine life and they generate an estimated $375 billion per year from fisheries, tourism and coastal protection. *source: Ruben van Hooidonk, Jeffrey Maynard, Jerker Tamelander, Jamison Gove, Gabby Ahmadia, Laurie Raymundo, Gareth Williams, Scott F. Heron, Serge Planes. **Local-scale projections of coral reef futures and implications of the Paris Agreement**. *Scientific Reports*, 2016; 6: 39666 DOI: 10.1038/srep39666)	
18 - Q18 General comment on Section 3				
Climate Policy Initiative	London	No	This section seems to suggest that there is growth potential because of the high value currently of uninsured losses - if that´s the case, it would be better to be explicit. This kind of analysis is certainly something that CPI EF would be interested in exploring.	No change considered necessary.
ICMIF	UK	No	We would have liked to see a reference to the insurance penetration rate which overall remains low, even in developed markets. We also suggest recalling the essential role of prevention and the need to invest in it for the viability of an insurance product. The UNDP estimates every dollar spent reducing people's vulnerability to disasters saves around seven dollars in economic losses. So spending on prevention not only increases the resilience of countries to future disasters, but also protects economic growth. (Putting Resilience at the Heart of Development, Investing in Prevention and Resilient Recovery, 2012).	Information on protection gap has been updated.
Lloyd's of London	UK	No	We agree on the importance of the insurance sector in the management of climate-related risks. In 2017, the Lloyd´s market paid out USD5.8bn in major claims, most of which were climate-related. It is important to recognise the long-term nature of the risks associated with climate change and the inherent uncertainties over its future impact. Insurers have substantial experience of dealing with natural disasters and their business models are designed accordingly. Climate change brings a significant likelihood of the faster recurrence of natural disasters and therefore higher economic losses. Nevertheless, not every climate-related natural disaster can	Added text to P15b1. Text under P15b1amended to reflect familiarity with risk structures and mitigating impact of annual contract repricing. Noted in other amendments to P11b1.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			be confidently attributed to climate change. Analysis of impacts must be soundly based on science. Population growth and the siting of residential property and economic activity in vulnerable locations are also relevant factors in the growth of economic losses. These are circumstances over which governments have some controls. Insurers can influence decisions on the location of developments through risk-based pricing. This is a beneficial process, which insurance supervisory processes should support.	Text has been added to end of section 2.
American Council of Life Insurers	United States	No	We acknowledge the appropriateness of the IAIS' desire to gain a better understanding of the risks posed by climate change or extreme weather events. We support market-led responses to investment, insurance underwriting and transition risk management. Insurers' investment decisions must be market-led and cannot be singled out from the rest of the investment market. However, insurers are constantly rebalancing their portfolios; it is an ongoing and never-ending adaption process. Insurers and reinsurers are well equipped to respond to climate risks given their ERM approach, long view of risk, detailed modelling and use of technology to support risk management and provide innovative products to that end. These are all matters that regulators should be seeking to support. We also acknowledge the need to deter misconceptions from establishing themselves in IAIS thinking and should not let the bounds of regulatory intervention expand too far. The fact that the future is uncertain and not uniform is exactly why universal, prescriptive responses are inappropriate; due consideration should be given to jurisdiction-specific circumstances.	Text on transition risks amended in section 3. Text on transition risks amended in section 7.
20 - Q20 Comment on Paragraph 14				
Association of Bermuda Insurers and Reinsurers	Bermuda	No	A more detailed discussion of the link between climate change and physical risk (extreme weather events) would be beneficial. Such a discussion could help to educate regulators, and in fact the report seems unbalanced on making this connection. For example, it references just one scientific paper on climate change impact on hurricane activity that itself makes a strong climate change statement. There is a much broader spectrum of more recent research results. It doesn't help to promote strong climate change	Greater discussion of links between climate change and natural disasters is set out in P11b1.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			statements. Uncertainty in physical risks seems to be underestimated (e.g. hurricane projections are very uncertain). In fact, uncertainty in climate change impact on physical risk is often quite high.	
ClientEarth	Global	No	The paper only meaningfully discusses two main categories of risk: physical and transition. It is unclear why the discussion on liability risks is then confined to one short paragraph at paragraph 37. Liability risks include the risk of climate-related claims under liability policies, as well as direct claims against insurance companies for failing to manage climate risks. Climate litigation is a rapidly developing area of law, bolstered by recent advances in science. Indeed, the sheer cost of adapting to climate change is likely to lead to a steep increase in climate litigation. This in turn could result in significant costs to insurers. ClientEarth would be happy to provide some further commentary on this topic for the draft paper.	Added text to section re: liability (draft version para 37)
Zurich Insurance Company Ltd.	Switzerland	No	Transition may also impact the type of insurance products and services demanded, and it represents a risk to insurance companies in particular if policymakers were driven to sudden and substantial policy action. This seems to be captured as "Strategic Risk' in paragraph 15, but could be made more explicit.	Text added to P14b2. Text on Strategic Risk (P15b3) clarified to reflect transition dimensions.
Lloyd's of London	UK	No	The insurance "protection gap" is an important subject in its own right. While it appears to be exacerbated by climate change, analysis of impacts must be soundly based on science and currently the evidence base needs to be deepened.	Noted

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Association of British Insurers	United Kingdom	No	Physical risks - A more detailed discussion of the link between climate change and physical risk (extreme weather events) would be beneficial. For example, it references just one scientific paper on climate change impact on hurricane activity that itself makes a strong climate change statement. There is a much broader spectrum of more recent research results Transition Risks- In addition to the risks specified in the Issues Paper, the negative impact of restrictive regulatory requirements should also be considered. For example, the Solvency II Directive in the EU does not correctly measure the risks related to long-term business and investments, including sustainable ones.	Text on links between climate change and extreme weather events has been amended in P11b1, including reference to a meta-analysis of 59 studies in scientific journals published in 2016-2017. Solvency II is not considered as a transition risk.
American Council of Life Insurers	United States	No	The use of the terms "shocks" to refer to natural disasters is somewhat inappropriate. The occurrence of low probability events in not new or surprising to insurers. In addition to the risks specified in this section, the negative effects of overly restrictive insurance regulatory actions should be considered for inclusion in this section. For example, regulatory demands for divestment of investments in particular sectors may cause investment values to plummet, creating more direct harm to insurer portfolios than any speculative harm based on the future impact of climate factors on market values.	Text amended to “events”.
PCI	United States	No	We would encourage the authors to include an explanation of the evidence supporting the statement "While certain climate factors are long-term in nature, many are already proving to be material for firms...", including additional examples. In case it is helpful to authors as an example of specific market situations, we point out that in the United States property residual markets have been shrinking and insurers' policyholder surpluses growing even as CO_2 concentrations have grown and average global temperatures have increased.	Text in P15 amended. Text in P16 amended to reference policyholder surplus.
American Insurance Association	USA	No	Physical Risks - We encourage Draft authors to more clearly explain the relevance of uninsured losses to the insurance sector.	Text in P14b1 amended.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			Transition Risks - We encourage the authors to better explain with examples of how scandals such as "Dieselgate" in the automotive sector could cause reputational damage to insurers invested in the implicated companies.	Text in P14b2 amended.
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	Last sentence needs an "s": "…productivity across sectors, the profitability of firms…"	Amended.
WWF	Switzerland	No	We would elaborate more on Transition Risks and specially to risks linked to technological innovations making old technologies obsolete. The growth in renewable energy is a very good example of innovation risks that should to our view be mentioned to illustrate this paragraph. A recent report from the International Renewable Energy Agency (IRENA), shows that the cost of renewable energy is now falling so fast that it will be consistently cheaper than fossil fuels by 2020.	Text in P14b2 amended to include reference to IRENA report.
IAA Resource and Environment Working Group	Canada	No	First bullet and box – it isn't clear whether this only covers property damage or includes life/health/agricultural/liability losses.	Noted
21 - Q21 Comment on Box 1				
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	Box 1 relating to the cost of natural disasters refers to California losses from wildfires reaching 10 billion stemming from damage to 21000 homes and 2800 businesses - do these statistics also come from the source cited in footnote 28 or is there a separate citation that could be provided for these numbers?	New reference added to clarify source.
23 - Q23 Comment on Paragraph 15				
Association of Bermuda Insurers and Reinsurers	Bermuda	No	Investment Risk - The statement that "insurers' capacity to pay future claims may be significantly affected if climate-related risks significant disrupt capital markets" is a very broad assumption that assets backing liabilities are highly concentrated in holdings which	Noted. Disagree re: point on Climate Risk Transfer.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			will be significantly impacted by climate related risks and insurers are not actively managing or monitoring their risk and exposures. Climate Risk Transfer - More broadly, climate risk transfer is not sufficiently covered in this paper. Building resilience on a national or municipal level - and closing the protection gap worldwide - needs climate risk transfer, and as such the inclusion of this might change the perspective and conclusions. We ask for consideration the following questions: Is closing the protection gap to weather and climate risks contradictive to the intention of this report? Resilience of insurers vs resilience of the financial, economic systems vs resilience of consumers and the global population?	Re q1: no. Re q2: question unclear.
ClientEarth	Global	No	Underwriting risk is not just limited to weather-related insurance claims. Claims under liability policies are also likely to increase. Reinsurers have already been seeking legal advice on their exposure to long-tail claims under CGL policies in connection with the current climate litigation in California. There is also significant potential for exposure under D&O, PI, and environmental liability policies.	Text amended under P15b1. Text amended to Liability Risk section.
ICMIF	UK	No	We find the statement that "many (climate factors) are already proving to be material for firms' dubious, without substantial evidence, and at odds with the use of "may' or "could' in the following part..	Text amended to better characterise examples.
Association of British Insurers	United Kingdom	No	The IAIS states that "certain climate factors are long-term in nature, many are already proving to be material for firms". We would note that, as underwriters of natural catastrophe risks, the insurance industry is well aware of, and sensitive to, the risks posed by climate change and extreme weather events. Existing risk-based insurance regulation such as Solvency II already requires insurers to identify and measure material risks, allowing them to withstand extreme losses caused by climate change. Underwriting risk: We would add that insurers are updating their underwriting policies by using predictive methods and modelling. Investment risk - The statement that "insurers' capacity to pay future claims may be significantly affected if climate-related risks significant disrupt capital markets" is a very broad assumption that assets backing liabilities are highly concentrated in holdings which will be	Text amended to better characterise examples. Text added to P15b1. Text in P15b4 amended to better reflect investment risk profiles and potential mitigants.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			significantly impacted by climate related risks and insurers are not actively managing or monitoring their risk and exposures. Initiatives aimed at addressing climate risks embedded in insurers' investments should both take into account existing measures and assess any new rules against potential macro-economic effects on the financial system. For example, any regulatory demands/incentives for mass divestment in particular sectors, if not well-managed, may cause significant turbulence on financial markets and may ultimately impact on financial stability. We would also add that the longer term nature of the risk arising from climate change means that, within the key solvency time frame, these risks are unlikely to completely manifest. The TCFD work-around scenario analysis is one potential method of assessing the physical and transitional risks to an insurer's investment portfolio, and current ClimateWise research is also looking to develop a toolkit for the latter. However, we are not yet at a point where there is enough comprehensive data on which to assess the risks to recommend setting out any regulation.	This paper does not endorse, call for, or encourage supervisors to make demands or create incentives for mass divestment in particular sectors. Text amended in section 7 to consider solvency timeframes.
American Council of Life Insurers	United States	No	We do not suggest that there are no future risks associated with climate risk, rather we merely identify the speculative nature of many of the authors' assertions that are typically preceded by the term "may." Also, we suggest eliminating references to "prominent" social movements under "Reputational Risks". In addition to the opinion-based use of the word "prominent", we suggest the IAIS not lend credence to efforts to pressure insurers into potentially illegal actions. For example, requirements for the cessation of underwriting coal-fired power infrastructure may constitute an illegal restraint of commerce in one or more jurisdictions.	Noted. No amendment. The word “prominent” has been removed. This paper does not endorse, call for, or encourage supervisors to make requirements of firms relating to climate change.
American Insurance Association	USA	No	We would encourage the authors to include an explanation of the evidence supporting the statement "While certain climate factors are long-term in nature, many are already proving to be material for firms...", including additional examples. In case it is helpful to authors as an example of specific market situations, we point out that in the United States property residual markets have been shrinking and insurers' policyholder surpluses growing even as CO2	Noted

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			concentrations have grown and average global temperatures have increased.	
IAA Resource and Environment Working Group	Canada	No	Fourth bullet – it should include potentially lower-than-otherwise expected investment returns. In addition, weather-related risks are not the only ones that may be relevant, e.g., long-term risks, such as CO2 emission liability-related risks, might arise.	Text Amended.
28 - Q28 Comment on Paragraph 18				
Association of Bermuda Insurers and Reinsurers	Bermuda	No	Changes to natural disasters are not happening very quickly, and step-changes in behavior are not likely. It´s incumbent on risk managers to monitor the science, be aware that changes are happening, recognize that prior statistics of weather may no longer apply, and evolve their view of risk accordingly. This can be done, and it should be a natural outcome of the same responsible risk management culture.	Noted
ClientEarth	Global	No	As referred to in comment 15 above, general insurers are not simply exposed to natural catastrophe and extreme weather risks. They are also exposed to claims under liability policies. Furthermore, the transition to a low-carbon economy may negatively impact demand for products aimed at the traditional fossil fuel industry.	Text relating to liability policies already noted.
29 - Q29 Comment on Paragraph 19				
General Insurance Association of Japan	Japan	No	In addition, while we are also aware that further consideration of the potential impact of climate change on mortality rates will be necessary, we do not see it as a priority matter for actuarial organizations at this time (paragraph 19).	Noted.
30 - Q30 Comment on Paragraph 20				
ICMIF	UK	No	To remedy the low penetration of agricultural insurance we suggest the creation of regional agricultural risk management associations, on a mutual, i.e. non-profit maximising basis.	Noted
31 - Q31 Comment on Paragraph 21				

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
ClientEarth	Global	No	The value of reinsurers is that they are not overly exposed to any particular geographic region. This means that risks which are considered "fundamental" to local insurers would be "particular" to global reinsurers. That being said, climate change is a global phenomenon. With that in mind, there are serious question marks over whether climate risks are of a "fundamental" nature even to reinsurers. If not adequately managed, fundamental risks could result in a systemic failure of the global insurance system.	We have elected not to profile the issue of systemic risk further in this section.
IAA Resource and Environment Working Group	Canada	No	The points made regarding affordability of reinsurer premiums are certainly valid. But it is important to note that there is just as much, if not more of a concern regarding the affordability of direct insurance to many consumers who are especially exposed to climate-related risks, whether due to concentration risk or severity/duration of the associated perils.	Noted
33 - Q33 General comment on Section 3.1.2				
ICMIF	UK	No	Insurers' strategic decisions concerning investments is not and should never be in the remit of supervisors. As stated in the opening remarks, the sustainability criteria should cover all sustainability issues: environmental (including but not limited to climate change criteria), social and governance criteria. It is relevant for insurers to consider ad hoc material sustainability factors. We believe an insurer needs to tailor its investment decision-making process to its specific needs; sustainability cannot in itself be a sole criterion for investment in the case of an insurance company. The duties of care, loyalty and prudence towards policyholders are key elements of any prudential regime. Some prudential regulation stipulate that insurers have the obligation to invest in the best interest of all policyholders and beneficiaries. Concretely, this means that sustainability will be one of the many criteria that insurers identify as appropriate in their investment strategies and asset allocations, in order to meet their obligations under the prudent person principle. In addition, the prudent person principle requires that all assets are invested in a manner that ensures security, quality, liquidity and profitability of the portfolio, and in line with the nature and duration of insurance liabilities. There are therefore many elements that impact both the strategic and the tactical investment decisions, and investment decision-making cannot be reduced to a binary relationship between sustainability vs returns.	Noted Amended text in P24 to reflect the range of issues firms shaping strategic responses to sustainable investment issues.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			The complexity of the subject thus requires that simplistic approaches that would not consider wider and interrelated factors be avoided. In particular, there is still a great deal of uncertainty as to what can be considered "green', and it will take years to develop a widely accepted taxonomy. What is perceived as "green' today may very well prove to be problematic tomorrow because of its negative externalities (e.g. biofuels considered a panacea for the climate and yet detrimental to food security hence threatening the SDGs, making evident that a life-cycle approach is needed when assessing an issue. The same applies to electric cars and their batteries, for example). Consequently supervisors should be cautious before taking any hasty regulatory measures. There is however an aspect which regulators and supervisors could urgently tackle, that is short termism. We believe it can be curbed with adequate prudential and accounting rules for long term investments.	
Lloyd's of London	UK	No	This section provides a useful overview of the risks posed by climate change to the investment activities of insurers. Nevertheless, in parts it is speculative and would benefit from a more solid grounding on evidence. It is reasonable to assume that climate change will have an impact on investments. Insurers' investment activities are already subject to intensive regulation, to mitigate any possibility that adverse developments will affect insurers' capacity to pay claims. It is reasonable to keep existing regulatory approaches under review to ensure that they take full account of emerging risks such as climate change. Nevertheless, overall we believe that existing supervisory regimes for investment are probably able to manage the additional risks arising from climate change. In relation to insurer investment activities, we would like to mention a report published by Lloyd's in February 2017 entitled "Stranded Assets: the transition to a low carbon economy", available here: https://www.lloyds.com/news-and-risk-insight/risk-reports/library/society-and-security/stranded-assets. This report looks at actual and potential examples of how stranded assets	Noted. The first three sections contain this foundation by reference. Report on stranded assets cited in P22.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			caused by responses to climate change could affect assets and liabilities in the insurance and reinsurance sectors.	
Association of British Insurers	United Kingdom	No	This IAIS paper would suggest that that climate-related risks would arise "suddenly" and create massive impacts - this is not the right focus. We believe that the IAIS should aim to more clearly highlight the medium/long-term likelihood of these risks emerging. Furthermore, we would add that in a number of cases, climate related risks are already embedded, today, in the investment positions and risk assessments of insurers. For example: - As the paper notes, some credit rating agencies already reflect such risks in their assessments. - In a number of regulations credit ratings are a key parameter in insurers' asset allocation decisions and/or risk measurement. As credit ratings value climate risks, these will be implicitly reflected on insurers' regulatory measures - so it is possible that no further policy actions will be needed. - Similarly, some regulations already require insurers to identify and measure all material risks - and a number of companies have already identified climate to be a material risk and have addressed it accordingly. With regard to the link between climate change risks and prudential rules, the ABI supports regulatory rules that measure and capture real risks. Therefore, if there is evidence that green/ brown assets are less or more risky than other investments, prudential rules must acknowledge the actual risks, rather than reflecting artificial incentives/disincentives.	Text has been amended to reduce unnecessary alarmist language. This section does not suggest further policy actions, it is rather reviewing the current and potential risks associated with climate change to relevant investments Noted. No Amendment made.
American Council of Life Insurers	United States	No	- Policymakers should recognize that the supply of "green"/"sustainable" assets remains extremely limited. o While indeed, it may be the case that a number of insurers' assets are not immune to climate change, regulatory actions that cause "sudden exits" from such assets or massive capital requirements that would have a similar effect should be avoided. Any such measures would affect financial stability. o The supply of assets immune to climate change risks is very limited. So even if insurers wanted to invest more in "green" assets, the supply is not there. So governments should focus on creating the right assets, suitable for insurers to invest in, instead of requiring	Noted. Text on supporting development of sustainable investment pipelines added to section 4.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			diverstiture of assets that are expose to climate risk. o Until adequate and sufficient supplies of non-carbon energy sources are available globally, some carbon energy will be needed to satisfy user demand. o Further, most major energy sector issuers of securities have already undertaken sustainable and green initiatives. Some sovereigns have done this as well. Regulators should not take unilateral action to encourage disinvestment or reduce financial statement credit for such investments. o Sustainability "regulation" and engaging or encouraging actions that can be viewed by others as manipulating investment values, unrelated to the pure investment risk as recognized by the market, has the potential to be very disruptive to the global economy - Regarding the link between climate change risks and prudential requirements, the insurance industry supports rules that measure and capture real risks. If there is evidence that green and/or brown assets are less/more risky than other investments, prudential regulation has to recognise this on the basis of the actual risks, not on the basis of artificial incentives/disincentives.	
34 - Q34 Comment on Paragraph 22				
Association of Bermuda Insurers and Reinsurers	Bermuda	No	Risks to investment activities are already being assessed throughout the investment process and monitored from an investment risk management perspective. Further P&C investment portfolios are high credit quality, highly diversified across sectors and sub-sectors. P&C portfolios can be fairly short duration which mitigates the impact of climate risks which are expected to manifest over a much longer period of time (many years vs 3-4yrs for the duration of the portfolio).	Noted
American Council of Life Insurers	United States	No	ACLI recommends adding the following language to the end of Paragraph 22. "However, it is also important to note that the utilities themselves are addressing the transition from coal-based to clean and renewable energy sources. During industry transitions in the past, such as the US deregulation of the late 1990s, the utility industry had an excellent record of minimizing the risk associated with "stranded assets" which are corporate balance sheet assets that have little to no value. These are items that have becomes obsolete or nonperforming well ahead of their expected useful life. If unable to earn an economic return, these stranded assets would lead to write-downs and presumably a weaker credit profile for	This suggested addition has been denied, due to irrelevance to key issue (disruptions to capital markets)

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			entities that invested in them. For oil and gas mining companies, this has historically referred to underdeveloped assets in the ground that ultimately have no value. For utility companies, the term has been used for generating plants or transmission lines no longer in use."	
PCI	United States	No	Investment Activities - We would encourage utilizing additional sources of data and analysis into this section to provide a broader representation of experts' views. As referred to earlier, Moody's Investor Services published a more recent report, on March 18, 2018, assessing the investment risk to be relatively small for insurers. Furthermore, the financial strength of utility sector stocks has been affirmed by rating agencies and the NAIC Securities Valuation Office. Regarding investment in "high-carbon sectors" , the authors may want to consider more thoroughly the significant mitigation efforts that are underway in those sectors - e.g., while the number of U.S. coal-based power generating facilities has dropped dramatically, electric utilities now account for almost all investment in U.S. wind power and more than 60% of investment in solar energy (Edison Electric Institute, Letter to California Insurance Commissioner David Jones, May 2, 2016). Furthermore, closed U.S. power plants are not "stranded assets", as the costs of decommissioning these plants typically are recovered in the electricity rate structure (Edison Electric Institute, Letter to California Insurance Commissioner David Jones, May 2, 2016).	Moody's report cited. Text added to P24.
American Insurance Association	USA	No	Investment Activities - We would encourage utilizing additional sources of data and analysis into this section to provide a broader representation of experts' views. As referred to earlier, Moody's Investor Services published a more recent report, on March 18, 2018, assessing the investment risk to be relatively small for insurers. Furthermore, the financial strength of utility sector stocks has been affirmed by rating agencies and the NAIC Securities Valuation Office. Regarding investment in "high-carbon sectors" , the authors may want to consider more thoroughly the significant mitigation efforts that are underway in those sectors - e.g., while the number of U.S. coal-based power generating facilities has dropped dramatically, electric utilities now account for almost all investment in U.S. wind power and more than 60% of investment in solar energy (Edison	Noted. See earlier comment.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			Electric Institute, Letter to California Insurance Commissioner David Jones, May 2, 2016). Furthermore, closed U.S. power plants are not "stranded assets", as the costs of decommissioning these plants typically are recovered in the electricity rate structure (Edison Electric Institute, Letter to California Insurance Commissioner David Jones, May 2, 2016).	
35 - Q35 Comment on Paragraph 23				
Association of Bermuda Insurers and Reinsurers	Bermuda	No	- Sovereign Debt: The suggestion that physical risk factors such as extreme weather may affect the credit ratings of sovereigns focuses on the lower credit quality and less economically diversified sovereigns which are more susceptible to the impact of the physical effects of climate change. The majority of insurance company portfolios primarily hold the sovereign debt of major economies in developed markets and have only limited exposures to the debt of emerging market economies which would be more susceptible to the impact of climate risk. - Municipal Debt: As with sovereigns, the greatest impact is to issuers in the municipal sector which are less resilient, have small and undiversified economies and as a result would also be lower rated. This also does not take into consideration risk management activities which manage the clash risk associated with exposures which have the potential to be exposed on the asset and the liability side. - Real Estate: The report's suggestion that policy measures and regulatory requirements for the energy efficiency of building stock affect the value of Real Estate portfolios is very specific to the Dutch property market and is not necessarily representative of the property holdings of all global insurers which may hold a diversified property portfolio.	Noted Text added to reflect transition risk aspect of sovereign debt, which is relevant to developed/developing divide raised in this comment. The Dutch case is cited as an example, and is not meant to be representative globally.
ClientEarth	Global	No	The value of property would also be affected by physical risks. For example, properties in low lying coastal areas may suffer from widespread devaluations.	Text in P23b3 amended.
IAA Resource and Environment Working Group	Canada	No	In addition, financial entities with extensive loan portfolios to population/industry segments that may be significantly affected by climate risks (e.g., fossil fuel entities, ill-located real estate developers and owners).	Text in P23b3 amended.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
36 - Q36 Comment on Paragraph 24				
ICMIF	UK	No	The feedback from our members is at odds with the assertions made in this paragraph implying that insurers are not conscious of the risks posed by climate change to their portfolios. Keeping this in mind, the challenges posed by climate change are difficult to fully grasp given that many risks may not materialise in the coming years, or materialise gradually. In addition to that, the short-term focus of some legislation such as Solvency II in Europe imposes constraints on insurers' ability to invest over the long-term.	Noted. Amendments made to reference need for evolutionary approach.
American Council of Life Insurers	United States	No	ACLI recommends adding a new Paragraph 25 in Section 3.1.2 to read: "Of course, the risk of stranded assets is not new and is, in fact, an important part of the insurance company's credit analysis process. For regulated utilities, the risk of loss due to stranded assets is remote. Utility companies operate on a cost-plus system. Precedent is in place that supports the recovery of all costs deemed to have been prudently incurred. In this regard, during the US deregulation of the late 1990s, utilities recovered the cost of the generation plants that were unbundled and sold. For instance, the Shoreham nuclear plant constructed in Long Island, New York cost $6B and was completed in 1985, but never was placed into service due to public opposition. The cost of the plant was recovered through rates."	Additional text has been added to P24. The suggested addition regarding stranded assets is not relevant to the logic of the section (which focuses on impact of asset impairment on debt and equity, not cost recover), and too specific to the US context.
PCI	United States	No	Investment Activities - We believe this section should take into account the actions that insurers and reinsurers are taking to protect their portfolios and respond to climate risks.	This is addressed in the section 4.
American Insurance Association	USA	No	Investment Activities - We believe this section should take into account the actions that insurers and reinsurers are taking to protect their portfolios and respond to climate risks.	Noted. Elsewhere text added on the initiatives by the insurance industry re climate change risk.
37 - Q37 General comment on Section 4				
ICMIF	UK	No	It is unclear to us why climate risks require a specific compliance mechanism	Text amended to “measurement systems”
Lloyd's of London	UK	No	We agree that the boards of insurance undertakings should be aware of climate change risks and their governance processes should reflect this.	Noted

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
WWF	Switzerland	No	We appreciate that the section recognizes that climate change will require a strategic answer from Insurances across their business lines. However, through their investment and underwriting activities, insurances not only at risk from climate change but also contribute to it. As a strategic answer, insurances should not only analyse the risks they faced across business lines but also the impact their activities have on climate change. A strategic answer should be to try over time to decrease the impact coming from their investment and underwriting activities and align their activities with the Paris Agreement.	Noted. It is beyond the mandate of this paper to create supervisory expectations / requirements for firms.
38 - Q38 Comment on Paragraph 25				
ClientEarth	Global	No	Ideally, preventing assets from becoming uninsurable in the first place would be in the best long-term interests of the insurance industry. To this end, the authors may consider including "Collaboration between insurers, policyholders and governments to improve infrastructure and increase climate resilience so as to prevent assets becoming uninsurable." The authors may consider discussing the Flood Re initiative in the UK as part of this.	Deals with collaboration Section 7.3
ICMIF	UK	No	We agree that the complex challenges presented by climate risks require a strategic response at a higher level, which we understand as the supra-national level. At national level, we think that it is important to encourage all stakeholders, from the public administrations to the private sector, to start assessing their exposure/vulnerability. In most cases, this could be helped by having insurance. In fact, studies show that sound policy decisions are very helpful in increasing the protection against extreme weather risks but also in enhancing incentives to invest in climate adaptation measures. A special word has to be said about cities. They are essential to ensure global sustainability. According to ECLEI figures, cities represent 1.2% of the Earth's surface, +50% of the global population, 75% of energy consumption & CO2-emissions; finally, 100 of the biggest cities have 30% of global GDP. .It is urgent that a constructive dialogue between the insurance sector and cities take place. Yet, according to ECLEI, more cooperation needs to take	Noted .

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			place between the insurance sector and the cities to overcome the challenges created by cities' inadequate use of insurance as a mechanism for risk management. We should like to illustrate the value of Public Private Partnerships involving a wide range of stakeholders, with the project called Derris. It is the first European project that unites public administration, companies and the insurance industry, in this case the Unipol Group. Its aim is to reduce the risks caused by extraordinary climatic events, in particular to provide SMEs with the necessary instruments to assess and reduce their own risks, with a set of specific actions and objectives: http://www.derris.eu/en/climate-change/	
Association of British Insurers	United Kingdom	No	It would be helpful if the IAIS could clarify what is meant by the statement "at a higher level, coordination across the insurance value chain".	Text amended to “and a degree of alignment between relevant stakeholders along the insurance value chain”
American Council of Life Insurers	United States	No	ACLI suggests adding a new bullet to read: "However, it is important for regulators and policyholders to be aware that, where an insurer finds that it is prudent not to divest from fossil fuel investments at this time, it is acting lawfully and subject to its legal duties. Accordingly, a proper context must be included in this study's conclusions so regulators, policyholders, and the public will understand and not be unnecessarily confused and concerned by climate change risk considerations." The issues associated with climate change risks are complex and need to be tackled in an integrated fashion by various parties including governments, regulators, financial sector players, other sectors, and more generally by the society as a whole. While most of the supervisory recommendations relating to future risks and conditions were considered from a risk assessment point of view, more focus should be placed on adaptation. Adaptation has the capability to change insurance risks in the future. In that regard, governments, including supervisors, have an important role to play in developing national disaster risk management frameworks and in terms of adaptation planning. Insurance is an integral part of the whole risk-management cycle, from risk identification to risk transfer	Disagree. The IAIS is not in a position to make such statements. Text added, as intro to section on PPPs. Text at end of section 5, on relevance for supervisors

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			and recovery. However, insurance products are neither a substitute for other adaptation measures nor an instrument for the funding of adaptation or mitigation measures. While we welcome the opportunity to consider the effect of environmental changes to the insurance sector, we believe that the Issues Paper does not give enough weight to recent trends in the industry that suggest that the industry is well-positioned to respond to environmental changes.	Text added to section 4 to reflect this point.
PCI	United States	No	Strategies for Insurer Climate Resilience - We would appreciate an explanation of what is meant by "…at a higher level, coordination across the insurance value chain." Also, it is not clear why climate risks would require compliance systems that are different from compliance systems used by insurers for all risks generally.	Text amended to “and a degree of alignment between relevant stakeholders along the insurance value chain”
American Insurance Association	USA	No	Strategies for Insurer Climate Resilience - We would appreciate an explanation of what is meant by "…at a higher level, coordination across the insurance value chain." Also, it is not clear why climate risks would require compliance systems that are different from compliance systems used by insurers for all risks generally.	Text amended to “and a degree of alignment between relevant stakeholders along the insurance value chain”
39 - Q39 Comment on Paragraph 26				
IAA Resource and Environment Working Group	Canada	No	We agree with the points made. In addition, it has to be understood that all climate-related risks are not caused by “climate change” – that said, to the insurer and insured the attribution of cause is of little import relative to the ensuing damages. The important factor is that the perils/risks are covered and where possible mitigated by appropriate behavior, e.g., resilient building standards, quality land-use planning.	Text added to end of section 5
40 - Q40 Comment on Paragraph 27				
Lloyd's of London	UK	No	We support the recommendations of the FSB Task Force on Climate-related Financial Disclosures. As noted in this paragraph, the framework it proposed is voluntary. We believe that it should stay that way.	Noted
41 - Q41 Comment on Paragraph 28				

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
ICMIF	UK	No	We would argue against any new reporting requirements. However, criteria adapted to the existing legislative environment to facilitate investors' performance of sustainability risk assessments could be useful. The criteria included in the TCFD's (Task Force on Climate-related Financial Disclosures) recommendations, PRI and UN Global Compact are clear and could be the basis rather than developing new uniform criteria at global level. We see a risk that such a development may result in a "one size does not fit all" solution, which may have an adverse effect on sustainable investment which is often innovative and still developing. We do however support the development of a common taxonomy of sustainable factors that is likely to help companies in their disclosures and will help investors to materialize sustainability for all assets, with the caveat that it should be flexible enough so as to avoid stifling innovation.	Noted
WWF	Switzerland	No	For clarity reasons, we would add a graphique illustrating the TCFD recommendations. Figure 6, p11 of the TCFD report: https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Annex-062817.pdf	Not considered necessary.
43 - Q43 General comment on Section 5				
Lloyd's of London	UK	No	This section presents a useful overview of how insurance supervision could be affected by climate change. We believe that, as a general principle, insurance regulatory systems should be risk-based. This means that prudential regulation of (re)insurance undertakings should focus on the real risks to their solvency and financial well-being, to ensure that policyholders are appropriately protected. Regulatory capital requirements should be based strictly on economic criteria and should not take account of wider policy considerations, however well-meaning. Recognition of non-economic factors in the setting of financial (Pillar 1) regulations for insurers can be harmful for the interests of their policyholders. Consequently we believe that supervisory responses to climate change should focus on the demonstrable possibilities that it will create or enhance risks to insurance supervisors´ objectives. Typically, those objectives will focus on policyholder protection and	Noted Decisions / initiatives by legislators to promote “green

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			financial stability. Capital requirements should not be based on considerations such as whether investments meant pre-determined criteria relating to their "greenness". Supervisory responses to climate change should focus on reporting and disclosure (Pillar 2).	investments" or discourage "brown investments" may affect the valuation of assets and also have compliance, legal and/or reputational risk if ignored. That makes this relevant from a supervisory perspective.
PCI	United States	No	Risk Management and Internal Controls - We recommend adding the word "reasonably" as follows: "…insurers' risk management systems, controls, and functions must be able to reasonably accurately identify, assess,, and account for the impacts of climate change."	Word "accurately" has been replaced.
WWF	Switzerland	No	Generally, the role of regulator should also be to examine and analyse to which extend are the investment and underwriting activities of insurance companies aligned with the Paris Agreement and to estimate the overall exposure of the insurance sector to high carbon industry such as Coal.	This is not necessarily within the mandate of IAIS members, and beyond the scope of this paper to make recommendations.
45 - Q45 Comment on Paragraph 31				
IAA Resource and Environment Working Group	Canada	No	We agree that access, affordability, and general consumer protection relating to climate-related risks are important. Indeed, some risks may well become uninsurable if new techniques/approaches are not developed and applied for transferring/pooling risks, which has the potential to affect many policyholders. In cases where these alternatives are created outside the private insurance sector (e.g., government-funded support schemes), their impact will need to be reflected both in the industry and in the supervisory environment. Maintaining a viable market for insurance products is a key element needed to respond to these risks. Supervisory cooperation and encouragement are clearly of central importance in dealing with these issues. We applaud the inclusion of macroeconomic stability as a factor. In addition, the macro risks to general economic growth, especially relating to applicable vulnerable population/business segments, should be considered. Although not specifically related to insurer sustainability, the future of our environment/ecology and related economic elements should be of concern to both the insurance	Text related to access and affordability added to section 5. This issue is reflected in Section 5. Text added to P33.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			industry and individual companies, which in turn should be of concern to their regulators (this could be considered to be included as second-order effects that are referred to in paragraph 33).	
46 - Q46 Comment on Table 1				
ClientEarth	Global	No	This table flags the objectives of insurance supervisors with regard to market conduct, consumer protection, access and affordability, conduct and compliance. It is excellent that the paper has identified this fundamental role in the context of climate change. To date, there have been issues with consumers falling foul of exclusion clauses which they did not understand, and sudden withdrawal of cover due to climate risks. In both cases, consumers' finances have been unfairly prejudiced. Unfortunately, there is no further discussion on this point in the paper beyond Table 1. It would be very helpful if the paper discussed these issues further.	Noted. It is beyond the scope of this paper to further elaborate on this issue.
Lloyd's of London	UK	No	This table demonstrates that insurance supervisors already possess the toolkits to deal appropriately with the risks arising from climate change. The key issue is ensuring that they deploy supervisory instruments appropriately. This, in turn, requires supervisors to be properly informed about the industries they are supervising and the risks, such as climate change, to those industries. We think that the box on "implications of climate change" for market conduct needs to be re-worded. The possibility that climate change will render property in certain, particularly vulnerable, locations more expensive or effectively uninsurable has to be faced: this is an inevitable consequence of climate change. As noted earlier, risk-based insurance pricing usefully sends strong signals over the economic costs of climate change, the need to site property sensibly and the desirability of taking appropriate precautions. Supervisors should not seek to reduce the volume of these signals by inappropriate controls on pricing, conditions and the ability of insurers to decline risks. We believe that "transparency for consumers on climate change practices" is not an implication of climate change but a potential	Noted. Table has been revised. Revised.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			response to it. As noted earlier, we think that climate-related financial disclosures should remain voluntary. We are unsure what "delivering enabling conditions for insurance product development" means. We do not think that "alignment of investments with climate goals" would be an appropriate response to the risks posed by climate change to macroprudential stability. Investments should be aligned with the overall financial stability and well-being of the undertaking holding them: otherwise its solvency can come under threat. We agree that if there is evidence that climate change is affecting the long-term value of particular assets, supervisors should take this into account, but their supervisory approaches should not otherwise take account of climate goals.	Amended.
PCI	United States	No	We do not agree that with the conflation of "uninsurable" and "redlining" under the second column of the table. An uninsurable risk is one that cannot be insured practically at any price. It is legitimate - in fact, important - for an insurer to decline to underwrite an uninsurable risk. By contrast, in the United States, the term "redlining" typically refers to the illegal practice of denying services, either directly or through selectively raising prices, to residents of certain areas based on the racial or ethnic composition of those areas. As a result, we request that the term "redlining" not be used to avoid misunderstanding of the situations described in the Draft. We also feel that the Draft lacks sufficient explanation and evidence of the macroprudential, systemic risks that it references, and note that systemic risk is currently the topic of other work streams at the IAIS. Furthermore, the paper implies that the transmission of systemic risk lies mainly with uninsured losses, a concern that, in the majority of instances, the insurance supervisor may be unable to affect.	Reference to “Redlining” removed Text amended to reflect importance of supervisory engagement beyond core prudential mandates relating to insured losses.
American Insurance Association	USA	No	We do not agree that with the conflation of "uninsurable" and "redlining" under the second column of the table. An uninsurable risk is one that cannot be insured practically at any price. It is legitimate - in fact, important - for an insurer to decline to underwrite an uninsurable risk. By contrast, in the United States, the term	See comment above

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			"redlining" typically refers to the illegal practice of denying services, either directly or through selectively raising prices, to residents of certain areas based on the racial or ethnic composition of those areas. As a result, we request that the term "redlining" not be used to avoid misunderstanding of the situations described in the Draft. We also feel that the Draft lacks sufficient explanation and evidence of the macroprudential, systemic risks that it references, and note that systemic risk is currently the topic of other work streams at the IAIS. Furthermore, the paper implies that the transmission of systemic risk lies mainly with uninsured losses, a concern that, in the majority of instances, the insurance supervisor may be unable to affect.	
WWF	Switzerland	No	Last line on “Macroprudential Activity”: Insurance should also align their **underwriting activities** with climate goals, and not only their investments.	Text added.
49 - Q49 Comment on Paragraph 34				
ClientEarth	Global	No	The priority of supervisors is to protect financial stability and consumers. Clearly, understanding how climate risks may manifest themselves is a key component of that. However, it must be remembered that climate risks are already resulting in losses. Accordingly, supervisors should not delay acting until they have a full understanding of climate risks. They are unlikely to fully develop this level of understanding within the timeframe available. Action and understanding will need to develop side by side.	Noted
50 - Q50 Comment on Paragraph 35				
ClientEarth	Global	No	As above, regulators may need to act swiftly in order to prevent systemic issues within the market. With this in mind, this list should include: i) "Ensuring the financial stability of the market and potentially intervening where insurers do not appear to be adequately managing climate risks", ii) "Ensuring that insurance companies are proactively engaging with consumers and raising awareness of climate risks including exclusions and transparent conditions for maintaining cover", and	These suggested additions are partially covered by the existing text and for the other part more suitable for follow-up guidance (if decided).

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			iii) "Issuing clear guidance so that market actors understand how climate risks fall within existing regulatory risk-management regimes."	
PCI	United States	No	Physical Risks - While we welcome the opportunity to consider the broad implications of climate risk, it is unclear from the Draft why uninsured risks would be a topic for substantial consideration in a paper about climate risks to the insurance sector. Furthermore, where there is a protection gap, we would recommend that the Draft encourage regulators to avoid unnecessary barriers to global reinsurance and insurance groups in their national markets since market access barriers likely are contributing to protection gaps, particularly in developing markets that are more prone to bearing the costs of climate risks.	Refer to para 14.
American Insurance Association	USA	No	Physical Risks - While we welcome the opportunity to consider the broad implications of climate risk, it is unclear from the Draft why uninsured risks would be a topic for substantial consideration in a paper about climate risks to the insurance sector. Furthermore, where there is a protection gap, we would recommend that the Draft encourage regulators to avoid unnecessary barriers to global reinsurance and insurance groups in their national markets since market access barriers likely are contributing to protection gaps, particularly in developing markets that are more prone to bearing the costs of climate risks.	See comment above.
51 - Q51 Comment on Paragraph 36				
ClientEarth	Global	No	As above, regulators may need to act swiftly in order to prevent systemic issues within the market. Having explored questions, regulators should then be prepared to take action.	Noted
American Council of Life Insurers	United States	No	Transition Risks - The last bullet, "Examining whether the capital allocation choices of insurance firms are well aligned with the future needs of the low-carbon economy…", appears to suggest that a regulator would question or interfere with the legitimate business decisions of management based on political decisions about the "needs" of the economy. We suggest this bullet be removed.	Bullet has been removed.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			ACLI recommends adding a new bullet to read "It should be recognized, however, that the electric power generation industry is leading the global transformation to low-carbon economies. In the United States alone, it deploys approximately $100 billion in capital each year. In less than a decade, the electric power industry has transformed the generation fleet, significantly reducing the amount of coal-based generation. More than73.5 GW of coal plant retirements and repowerings have been announced to date, representing approximately 22 percent of the existing coal fleet, leading to a dramatic reduction in greenhouse gas emissions. Furthermore, utilities account for almost all investment in wind power and more than 60 percent of investment in solar energy. Low- and zero-carbon-emitting generation sources now account for almost 65 percent of electric generation, representing a 38 percent increase over a decade. Carbon emissions for electric generation are also down dramatically over this period and, in fact, are close to 20 percent below 2005 levels, as of the end of 2015. All of this has been accomplished during a period when the industry's financial performance has improved and the returns to investors have been strong and stable. Utilities are in fact successfully leading the transformation to a low-carbon economy and insurance companies should not be arbitrarily deterred from investments in them.	
PCI	United States	No	Transition Risks - Insurers are already significantly invested in the green economy, which we feel should be reflected in this section. Furthermore, with our concern about regulatory mandates on investment decisions already described in mind, it is unclear what role for the regulator the Draft envisions.	Text on initiatives by the insurance industry will be added elsewhere
American Insurance Association	USA	No	Transition Risks - Insurers are already significantly invested in the green economy, which we feel should be reflected in this section. Furthermore, with our concern about regulatory mandates on investment decisions already described in mind, it is unclear what role for the regulator the Draft envisions.	See earlier comment
WWF	Switzerland	No	Last bullet point: Regulators should also analyse to which extend the underwriting portfolios of Insurances is aligned with the Paris agreement and are contributing to the transition towards a low carbon economy	Seems more fitting for consideration in follow-up work,

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
52 - Q52 Comment on Paragraph 37				
ClientEarth	Global	No	Please see our comments on paragraph 14. We would recommend that the paper provides a more detailed discussion of liability risks.	Done.
Zurich Insurance Company Ltd.	Switzerland	No	Equally, or more significantly, risks may arise from third-party liability. While there are currently no signs that such risks may materialize through court practice, legal practice in certain jurisdictions may incentivize insurers to potentially misprice policies by not excluding emerging risks from third-party liability for fear of setting a precedent with respect to existing policies.	Noted
IAA Resource and Environment Working Group	Canada	No	In addition, pension funds and other collective investment-related entities should consider climate change risks as part of their investment considerations.	Noted but considered to be outside of the scope of this paper.
53 - Q53 General comment on Section 6				
ICMIF	UK	No	We do not believe that the conditions are met at global level to amend the ICPs in light of the risks posed by climate change. The initiatives already taken by the jurisdictions that are documented in this paper are in early stages and all concur on the challenges created by the availability of data. We think the IAIS will play an important role as coordinator between the jurisdictions and disseminator of best practices. It seems to us that the relatively limited number of responses to the survey tends to point to the need for the IAIS to become instrumental in facilitating the exchange of information between advanced to less advanced and emerging markets.	No amending of ICPs is currently considered.
Lloyd's of London	UK	No	The IAIS should think carefully before amending its ICPs to reflect an emerging risk such as climate change. Any changes it makes should reflect the overall objectives of the ICP framework and its application to insurance supervision in all jurisdictions. As the paper notes, climate change will affect undertakings with different business models and carrying on business in different jurisdictions differently. A "one size fits all" approach to the risks to them from climate change is inappropriate.	No amending of ICPs is currently considered

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			As section 6 sets out, the existing ICPs can be interpreted so as to entail reasonable supervisory approaches to the climate change risks facing individual firms.	
Association of British Insurers	United Kingdom	No	The Insurance Core Principles (ICPs) provide a general basis for the identification, assessment, management, and supervision of risk within the insurance sector. If the IAIS decides, following this consultation, that it would be appropriate to provide consideration of climate risk management by insurers and supervisors within this framework, one approach it might consider would be to provide appropriately-tailored supporting guidance to the ICPs. For example, in the form of an Application Paper, sharing observed best practice as experience is gained over time. Supporting guidance would be particularly helpful in relation to the following areas set out below (see comments on Paragraph 42, 47 and 70).	Noted
American Council of Life Insurers	United States	No	Where real and specific issues of climate-related risk are identified, they can be most effectively handled on a company-by-company basis in discussions with supervisors, under the existing ICPs and respective local frameworks. We strongly believe that insurance regulation efforts in response to climate change risks is neither the appropriate nor most effective place for global action. Each geographic area will be affected differently, and they each need to address the probability and impact of natural catastrophes they suffer from differently. In fact, each company needs to address their own investment as well as underwriting risk as they do today. This is not a one-size-fits-all issue.	Noted
59 - Q59 Comment on Paragraph 42				
Association of British Insurers	United Kingdom	No	Consideration of environmental, social and governance factors may be part of general systems of governance.	Noted
WWF	Switzerland	No	In the sentence “and the values, norms and supporting policies necessary to ensure that climate risks are appropriately considered across the organisation in mainstream activities and decision-making “, we would add climate impacts to reflect that the board need to also	Disagree, as this is describing the impact that a firm has on climate change trends itself (i.e. the French Article 173 provision). Very hard to evaluate, and likely beyond the mandate of many supervisors.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			set the tone on the impact that the activities of the insurance has on climate change.: “ and the values, norms and supporting policies necessary to ensure that climate risks and **climate impacts** are appropriately considered across the organisation in mainstream activities and decision-making “	
60 - Q60 Comment on Paragraph 43				
Climate Policy Initiative	London	No	ICP 8 (section 6.1, page 18) deals with insurer's liabilities, including policy provisions and aggregate claim liabilities, as well as determination of reserves for financial risks, etc. This section I think relates directly to our Clean Energy Investment Trust work in terms of matching long-term liabilities with renewable portfolios for pension funds and insurance companies. https://climatepolicyinitiative.org/publication/clean-energy-investment-trust-financial-innovation-renewables/	May relate, but not relevant.
PCI	United States	No	Risk Management and Internal Controls - We recommend adding the word "reasonably" as follows: "…insurers' risk management systems, controls, and functions must be able to reasonably accurately identify, assess,, and account for the impacts of climate change."	Have removed term “accurately”.
American Insurance Association	USA	No	Risk Management and Internal Controls - We recommend adding the word "reasonably" as follows: "…insurers' risk management systems, controls, and functions must be able to reasonably accurately identify, assess,, and account for the impacts of climate change."	See previous comment.
62 - Q62 Comment on Paragraph 45				
IAA Resource and Environment Working Group	Canada	No	The first bullet not only relates to expected cash flows, but also other factors, such as margins over current estimates (MOCE) and long-term investment earnings expectations.	We don’t see how this comments affects the text.
63 - Q63 Comment on Paragraph 46				
WWF	Switzerland	No	“Supervisors may seek to engage with insurers on how Risk	Disagree, as this is describing the impact that a firm has

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			Management, Actuarial, and other functions are set up to consider climate change risks **and impacts**, what actions have been taken to address such risks, and how this information is applied across the organization, including in investment decisions. "	on climate change trends itself (i.e. the French Article 173 provision). Very hard to evaluate, and likely beyond the mandate of many supervisors.
64 - Q64 Comment on Paragraph 47				
Association of British Insurers	United Kingdom	No	As noted in Insurance Europe's response to the IAIS's consultation on ICP 15 earlier this year, guidance under 15.1 can usefully be expanded to cover the notion of a "prudent person principle'. This principle should require that, with respect to the whole portfolio of an insurer's assets, it only invests in assets and instruments whose risk it can properly identify, measure, monitor, manage, control and report, and appropriately consider in the assessment of its overall solvency needs. In addition, assets should be required to be invested appropriate to the nature and duration of insurance liabilities, as well as to ensure the security, quality, liquidity and profitability of the portfolio as a whole. Furthermore, it should be required that investments are made in the best interests of policyholders and beneficiaries to avoid any potential conflicts of interest. Under such a prudent person principle consideration could also be given to including reference to environmental, social and governance factors as was done in recent EU IORP2 Directive which covers European pensions schemes.	Noted but beyond scope of this Issues Paper.
65 - Q65 Comment on Paragraph 48				
Climate Policy Initiative	London	No	We have done some early exploration into the new products required to manage climate risk. Your members would be interested in finding out more as our research develops.	Noted
67 - Q67 Comment on Paragraph 50				
PCI	United States	No	We have concerns with the phrase "significant disruption to financial markets" or a "rapid devaluation of financial assets" because it is unclear what the timeframe is for such statements. Current evidence suggests that insurers and reinsurers are adjusting to climate risks well, as described earlier. Perhaps the Draft could better differentiate between what risks it sees as currently being material and what risks it sees as being material in the future. Furthermore, such assertions would be stronger with more evidence offered.	The sentence is drafted in a conditional tense: "if … were to… may". No need for change.

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American Insurance Association	USA	No	We have concerns with the phrase "significant disruption to financial markets" or a "rapid devaluation of financial assets" because it is unclear what the timeframe is for such statements. Current evidence suggests that insurers and reinsurers are adjusting to climate risks well, as described earlier. Perhaps the Draft could better differentiate between what risks it sees as currently being material and what risks it sees as being material in the future. Furthermore, such assertions would be stronger with more evidence offered.	See earlier comment
68 - Q68 Comment on Paragraph 51				
WWF	Switzerland	No	The 2C° alignment of the insurance sector should also be analyzed by the regulator in order to estimate the risks : « Once the rationale for addressing climate change has been set, a helpful next step can be an examination of how climate change may impact the insurance sector. This can take the form of an initial 'stock-take' of risks, exposures, **2C° alignment** and strategic responses to climate issues by firms in the local market "	Noted
69 - Q69 Comment on Paragraph 52				
IAA Resource and Environment Working Group	Canada	No	Although stranded assets are mentioned in this paragraph, it is somewhat surprising that this risk is not mentioned and given more prominence elsewhere in the paper.	More info on stranded assets has been added to section 3.
70 - Q70 Comment on Paragraph 53				
ClientEarth	Global	No	We would counsel caution in incorporating climate risks into existing mainstream categories of risk. Climate risks are potentially correlated and so could simultaneously exert an effect across the different categories. For example, increased claims and reduced investment returns may happen simultaneously. A proper understanding of this correlated action may be lost if a holistic approach to climate risk is not adopted.	Noted but we would expect the prescribed risk management framework of insurers to identify and address such correlation.
Association of British Insurers	United Kingdom	No	Any guidance could consider: - new or emerging risks and ESG factors including risk related to climate change within the Own Risk and Solvency Assessment (ORSA);	Noted, but not in the scope of this paper to set out guidance…

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			- climate risk and mitigation within analysis as part of risk management systems and policies. For example, this could cover transition, physical and liability risks on both the asset and liability side of the balance sheet - climate risks in relation to the sustainability of investment policies and practices. For example, this could ensure they are consistent with a managed transition to a "two degrees or below' pathway, limiting transition risk in line with specific targets - Consideration of how sustainability factors may be reflected in fiduciary duty.	
71 - Q71 Comment on Paragraph 54				
Lloyd's of London	UK	No	We have concerns about any suggestion commenting on climate change in ORSAs should be mandatory. The ORSA is supposed to be a firm's own assessment of risk. Prescriptive obligations to include material on particular issues should be avoided, as they can suggest that the ORSA exercise is a "tick box exercise". Regulators should expect firms with significant climate change exposure to cover it in their ORSAs, but this should not be mandatory.	The text does not suggest that consideration of climate change in ORSA should be mandatory.
73 - Q73 Comment on Paragraph 56				
Zurich Insurance Company Ltd.	Switzerland	No	Since, to our knowledge, no insurance company has, to date, conducted comprehensive climate change stress testing it could be helpful for the industry to be able to rely on a set of reference parameters translating climate change scenarios into financial market and Nat Cat shocks.	Noted but considered to be outside the scope of this Issues Paper
74 - Q74 Comment on Paragraph 57				
WWF	Switzerland	No	When mentioning scenario analysis, we would use the term **"forward looking"** portfolio analysis to reflect that the scenario analysis should not be static (such as Carbon Footprint analysis) but forward looking in line with TCFD recommendations.	Amended
IAA Resource and Environment Working Group	Canada	No	We are glad that this draft refers to stress testing as an important tool to use in the analysis of the effect of climate change. Especially important is the selection of appropriate scenarios – the IAA has prepared several papers on this topic and is in the process of updating its Risk Book with an additional chapter on stress testing.	Noted

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			We encourage the IAIS to explore the development of sample scenarios that might be used by insurers in their disclosures, developed in the spirit of the TCFD recommendations. If asked, the IAA stands ready to help the IAIS in this process.	
79 - Q79 Comment on Paragraph 62				
Association of British Insurers	United Kingdom	No	The FSB's Task Force on Climate-related Financial Disclosures provides helpful guidance to corporates for disclosures on climate-related financial risks.	Agreed
82 - Q82 General comment on Section 7				
ClientEarth	Global	No	As raised in our comment on paragraph 34, it is important that supervisors are able to take swift action where there are potential systemic risks. Many of the items in this section discuss developing a deeper understanding of climate risk. While this is clearly crucial, insurance supervisors must also be prepared to take action if they suspect that climate risks are not being adequately managed. With this in mind, understanding and intervention should be developed side by side and not sequentially.	Noted
87 - Q87 Comment on Paragraph 66				
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	Replace "request for government" with "requests from the government". It is clear in the first and third bullets which jurisdictions these are, however it may be helpful to more clearly identify the jurisdiction addressed by the second bullet (presumably Sweden).	Amended
IAA Resource and Environment Working Group	Canada	No	Second sentence – “requests for government” appears to be missing a word – should it be “government action”, “government intervention” or …?	Amended
90 - Q90 Comment on Paragraph 68				
IAA Resource and Environment Working	Canada	No	Although we agree with this step, we would like to emphasize that, since this is an evolving field in which knowledge gets enhanced periodically, it would also be useful to point out that it may be worthwhile to revisit and update guidance periodically, e.g., at least	Noted.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
Group			once every five years, and more frequently if new insights that affect climate change risks become available prior to a scheduled re-assessment.	
94 - Q94 General comment on Section 7.2				
WWF	Switzerland	No	The colour system for the Graph 5 should be explained. It is not clear to what the 3 colours refer to.	To be added
96 - Q96 Comment on Paragraph 71				
ClientEarth	Global	No	See our comment at paragraph 53.	
IAA Resource and Environment Working Group	Canada	No	Figure 5 – one could make the case that, because of stranded assets, the credit risk categories in the figure should be categorized as being yellow, rather than green. For example, credit with respect to mortgages and directly-held residential and business properties would be included here, as well as low-lying coastal and urban infrastructure.	This is a figure reproduced from a supervisor as an example, and it is not within the mandate of the IAIS or the SIF to change it.
103 - Q103 Comment on Paragraph 76				
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	The cross reference to the NAIC's Financial Condition Examiners Handbook should be to Section 8.8, not 8.6.	Will be amended
WWF	Switzerland	No	Regulators should also ask questions on the exposure of insurances to climate change and the climate alignment of their investment **and underwriting** activities.	Noted. This para is a description of existing practice.
104 - Q104 Comment on Paragraph 77				
IAA Resource and Environment Working Group	Canada	No	This is a good list of questions. In addition, relating to opportunities, inquiries regarding insurance products are relevant, especially regarding coverage of climate-related exposures of vulnerable individuals and businesses (e.g., through micro-insurance/inclusive insurance provided in an efficient manner), and mitigation approaches used to limit the insureds' and insurers' losses as a result. Positive action of encouragement/nudging to provide such	Will be amended

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			risks may be needed. In addition, a broader perspective of private-sector/public-sector cooperation in risk transfer and risk spreading is needed to properly help consumer protection.	
105 - Q105 General comment on Section 7.2.4				
Association of Bermuda Insurers and Reinsurers	Bermuda	No	ABIR urges caution on the call for regulatory requirements to look at stress testing motivated by climate change. If external views on either the timing or severity of climate change impacts are the basis for the tests, then this could be problematic for organizations that are already data-driven and thoughtfully thinking about this on an ongoing basis. A couple questions posed based on this are; how would these tests be designed? and who will design them? The take-away for regulators should not be to prescribe tests.	Noted
106 - Q106 Comment on Paragraph 78				
ClientEarth	Global	No	Stress testing should be informed by the most recent peer-reviewed climate science and there should be a system in place to ensure this is monitored and updated frequently. The IAIS may consider establishing a forum whereby the insurance industry is kept abreast of the latest developments in the science. This would promote both consistency and accuracy. Care should be taken to avoid stress testing physical risks in isolation from the corresponding transition and liability risks which will accompany climate change. As mentioned under paragraph 53, these risks are all correlated.	Noted
107 - Q107 Comment on Paragraph 79				
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	Last sentence, delete "the" before "probability".	Will be amended
109 - Q109 Comment on Paragraph 81				
IAA Resource and Environment Working	Canada	No	In addition, it might be useful in some jurisdictions to provide sufficient guidance so that relatively consistent scenarios can be applied by different insurance companies to enhance comparability.	Noted

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
Group				
110 - Q110 General comment on Section 7.2.5				
WWF	Switzerland	No	We suggest the following changes in the wording (in fat text) in order to align with the wording used by the TCFD recommendations: • Exposure Assessments • **Forward Looking** Scenario Analysis • Evaluation of alignment with a low-carbon economy scenario **2°C or lower scenario** These terms should be used throughout the report when mentioning climate analysis and scenario	Text has been amended to reflect forward-looking scenario analysis.
113 - Q113 Comment on Paragraph 84				
PCI	United States	No	Portfolio Exposure Assessments - The discussion of metrics and boundary conditions appears somewhat arbitrary and suggests a serious potential for supervisors to use such levers to insert themselves inappropriately into management's business and investment decisions. If the concern here is that insurers may be too invested in carbon-intensive industries that may soon be obsolete, we would suggest that such a view is very short-sighted. Of course, technological advances will squeeze out some "carbon-intensive industries" in the coming decades, but that is unlikely to be a risk to property and casualty insurers' investments, especially if insurers are only holding short-term or highly-liquid investments. Supervisors should be monitoring risks that may actually materialize in a way that would affect insurers, while keeping in mind that insurers will have the opportunity to move their short-term investments away from "carbon-intensive industries" in the future as green technology advances. Furthermore, we would again point out that many carbon-intensive industries are also the largest investors in renewable energy.	Disagree
American Insurance Association	USA	No	Portfolio Exposure Assessments - The discussion of metrics and boundary conditions appears somewhat arbitrary and suggests a serious potential for supervisors to use such levers to insert themselves inappropriately into management's business and investment decisions. If the concern here is that insurers may be too invested in carbon-intensive industries that may soon be obsolete,	See previous comment.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
			we would suggest that such a view is very short-sighted. Of course, technological advances will squeeze out some "carbon-intensive industries" in the coming decades, but that is unlikely to be a risk to property and casualty insurers' investments, especially if insurers are only holding short-term or highly-liquid investments. Supervisors should be monitoring risks that may actually materialize in a way that would affect insurers, while keeping in mind that insurers will have the opportunity to move their short-term investments away from "carbon-intensive industries" in the future as green technology advances. Furthermore, we would again point out that many carbon-intensive industries are also the largest investors in renewable energy.	
114 - Q114 Comment on Paragraph 85				
WWF	Switzerland	No	See comments in paragraph 86 on wording	-
115 - Q115 Comment on Paragraph 86				
ClientEarth	Global	No	The time horizons point is fundamental. Many companies and supervisors focus on stability with regard to shocks experienced within the next twelve months. There seems to be less discussion of longer term trends which may severely impact on insurers' business models	Noted
WWF	Switzerland	No	See comments in paragraph 86 on wording. We would also mention the example of the Swiss Government how has carried out 2C° compatibility tests for the investments of Swiss Pension Funds and Insurances: In 2017, the FOEN and the SIF initiated pilot tests to analyse the climate alignment of financial portfolios of Swiss pension funds and insurance companies. The stock and bonds portfolios of 79 pension funds and insurance companies, which represent about two thirds of the total market as measured by assets under management where analysed. (Source: https://www.bafu.admin.ch/bafu/en/home/topics/climate/info-specialists/climate-and-financial-markets.html)	Not included as not a supervisory institution and not an observed supervisory practice (for which this section is intended)
118 - Q118 General comment on Section 7.3.1				

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
BJD Reinsurance Consulting, LLC	United States	No	"Supervisors can utilize their power to convene insurers, other financial institutions, and civil society stakeholders, to collaborate on climate change issues - such as understanding financing gaps associated with climate goals." Governmental and High Level Official representatives - Ministers, State Secretaries - should be added to the list above. It will then be more balanced to associate and use the word "power" with those who carry it the most and not only with the civil society stakeholders.	Changed to "influence"
120 - Q120 General comment on Section 7.3.2				
BJD Reinsurance Consulting, LLC	United States	No	"Engaging with public authorities working beyond the financial sector. Supervisors can play an important role in the development of integrated policy frameworks to manage environmental risk beyond the financial sector, such as national disaster risk management and climate adaptation planning" Yes, and reference needs to be clearly made to the public insurance gap and the necessity of data, GIS localization, exposures, assets values, sums insured, damages and losses including fiscal burden etc.	Comment is not specifically enough in terms of the expected messaging beyond what is already in the draft paper to be considered.
121 - Q121 Comment on Paragraph 89				
IAA Resource and Environment Working Group	Canada	No	Collaboration with other regulatory authorities and agencies of government will be quite important in the future, not only to spread knowledge of exposures and risks, but in coordination of supervisory activities such as enhancing techniques used in the analysis of risks inherent in investment portfolios and loss recovery activities (e.g., claims handling in cases of disasters). Collaboration with other elements of the government is crucial, as this is not just an issue of sustainability of the insurance industry and its participants, but the broader society as well. In addition, collaboration with professional societies and firms, such as those involved in actuarial work or meteorologists may also prove of importance.	Noted
124 - Q124 General comment on Section 8				

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
ICMIF	UK	No	Climate change is "a truly global issue that requires a global response' (p.43 Swedish case study). A holistic approach to adaptation involving national, regional and local governments is a pre-requisite to enable the transfer of risk to the insurance sector. We thus feel strongly about the need for the IAIS to enhance its facilitating role with regard to the transfer of knowledge from advanced to less advanced markets in the field of resilience to climate-related risks. In this respect, we would like to see this chapter needs fleshed out to include a wider range of jurisdictions, in particular in emerging countries. This should ensure some useful cross fertilisation in knowledge, experience and challenges from the grass root level.	Noted but it was decided to include those countries that were part of the SIF.
Association of British Insurers	United Kingdom	No	The Issue Paper helpfully points out that national supervisors are already actively incorporating climate-related risk into their approach. With regulatory developments already underway, there is a considerable risk that developments to mitigate climate-related risks are divergent and uncoordinated, This would be particularly problematic for global firms, who may have to adhere to different standards at home and in their host jurisdictions. However, we would also note while coordination may be helpful to resolving some of these concerns, any coordination would require careful consideration given : the lack of a common taxonomy on which to define, measure and articulate the risks from climate change, variation of climate risks across different geographies, the inconsistent understanding of the key issues driving the risk profiles, and potential need to provide mitigation.	Noted
160 - Q160 Comment on Paragraph 114				
IAA Resource and Environment Working Group	Canada	No	Second line. We believe that what is intended is the incorporation of the identification, analysis and development of appropriate actions relating to ESG risks.	This has been amended
185 - Q185 Comment on Paragraph 133				

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	The last sentence does not read correctly; suggest clarifying.	Text clarified
287 - Q287 Comment on Paragraph 204				
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	As there are a variety of views among state insurance regulators within the NAIC on the issues addressed by this paper, insert a new paragraph 204: "Within the United States among state insurance regulators, there are a variety of views on climate change. While some States have taken certain approaches, such as those described in sections 8.9 and 8.10, other States differ on the regulatory approach to manage and mitigate catastrophe risks. The NAIC has undertaken work related to climate risk as described below, but there is not an official NAIC policy on this issue nor has the NAIC endorsed any particular approach taken by individual States or the IAIS."	Added
293 - Q293 Comment on Paragraph 209				
American Council of Life Insurers	United States	No	ACLI recommends adding a new Paragraph 210 under Section 8.8.2 to read "Importantly, the NAIC Survey is not intended to disrupt NAIC efforts to accomplish uniform regulation of and support for insurance company solvency. The regulatory uniformity that can be achieved through the NAIC has helped companies operating across the 50 states. Many insurers incorporate the viewpoint of the NAIC Securities Valuation Office (SVO) into their credit decisions. It has been clear that the SVO has been aware of the risks inherent in coal mining companies and related service companies. Certainly, some mining operations have seen their credit profile deteriorate over time, while others remain strong. When it comes to utilities that include coal as a percentage of their fuel mix, however, the SVO has viewed the vast majority of these companies as low risk, with nearly 70 percent receiving the SVO's highest creditworthiness designation.	Disagree / too detailed for the purpose of the paper.
294 - Q294 General comment on Section 8.8.3				
American Council of Life	United States	No	This Section is not about the NAIC.	Removed.

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
Insurers				
297 - Q297 General comment on Section 8.8.4				
American Council of Life Insurers	United States	No	This Section is not about the NAIC.	Removed.
301 - Q301 Comment on Paragraph 214				
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	First sentence, replace "commissions" with "departments". Last sentence, need to spell out CDI as this is the first time the acronym is used: "…enable the California Department of Insurance (CDI) to compile…"	Agreed
302 - Q302 Comment on Paragraph 215				
American Council of Life Insurers	United States	No	ACLI recommends adding the following language before the final sentence of this paragraph: "Policyholders and claimants are also protected against heightened insurer solvency risk by existing risk based capital and other statutory investment restrictions. Moreover, insurers are now required via the Risk Management and Own Risk and Solvency Assessment Model Act (ORSA) to employ rigorous risk management disciplines. When selecting and monitoring these investments, assessing risk (including stranded asset risk) is an integral part of credit research and the due diligence process. Many insurers use a vigorous risk management discipline across portfolios, which includes scenario analyses based on the internal price forecasts for fossil fuels. In addition, many insurers also conduct regular sector reviews that address the largest portfolio risks, including climate change issues and new statutes like last year's SB 185 and SB 350."	No amendment made.
National Association of Insurance Commissioners (NAIC)	USA, NAIC	No	For clarity, replace "Department" with "CDI" in both sentences.	Agreed
326 - Q326 Comment on Paragraph 321				

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
General Insurance Association of Japan	Japan	No	Finally, in Chapter 8.9 (USA - California: California Department of Insurance), the IP states that the "SIF should continue urging the TCFD to call for mandatory disclosures. In addition, it should urge that the FSB and the G20 take concrete steps towards this end". It is inappropriate for this comment to appear in this chapter, which describes the CDI's efforts. Rather, it should appear merely as the expectations of the CDI regarding the SIF.	Removed.
345 - Q345 Comment on Paragraph 242				
American Council of Life Insurers	United States	No	The final sentence should be changed to read as follows: "These factors justify consideration of the resilience of insurance firms to climate risks."	Amended to “consider”
346 - Q346 Comment on Paragraph 243				
ClientEarth	Global	No	The paper concludes that general insurers and large reinsurers are well positioned to manage physical risks posed by climate change. Given our comments above and recent enormous natural catastrophe losses, we are not sure the IAIS can come to his conclusion. This is particularly so given the potentially "fundamental" nature of climate risks. Prominent insurers such as AXA have publicly declared that a 4 degree world would be uninsurable. This is a serious problem for all insurers, even general insurers and large reinsurers.	Text regarding physical risks has been amended. AXA quote regarding uninsurability has been referenced in section 3.
American Council of Life Insurers	United States	No	The sentence beginning with "Because of the dynamic" should be edited to read "Because of the dynamic, complex, and global impacts of climate change across the economy and society, many insurance businesses may be exposed to climate risks over the long term." Furthermore, the final sentence should be deleted.	Amended.
347 - Q347 Comment on Paragraph 244				
American Council of Life Insurers	United States	No	ACLI recommends you change the paragraph to read: "According to some, there is an increasing consensus across the financial sector that the potential systemic impacts of climate change may require consideration of a systemic global response, exemplified by work at the international level in the G20 and the FSB. These developments create a strategic framework for the IAIS and its members to consider the supervisory implications of climate change."	Disagree

Organisation	Jurisdiction	Confidential	Answer	Resolution of comments
349 - Q349 Comment on Paragraph 246				
American Council of Life Insurers	United States	No	Change the first sentence to read "Climate risks warrant ongoing consideration by supervisors."	Amended
350 - Q350 Comment on Paragraph 247				
ClientEarth	Global	No	As discussed at our comment to paragraph 8, it would be helpful if the paper set out the process by which an Application Paper would be commissioned and some potential topics which could be covered. The present paper illustrates how climate change is a serious challenge for the sector and so further IAIS action will clearly be needed.	The process for developing guidance material in Application Paper is described in the IAIS Member Handbook. This is typically not to be dealt with an Issues Papers.
351 - Q351 General comment on Annex 1				
OK - Oklahoma Department of Insurance	USA, Oklahoma	No	Questions about how to run and operate the business should reside with the board of directors, shareholders and officers. Recognizing risks followed by pricing said risk is tantamount to the foundations of the insurance industry. Telling insurance carriers how they should identify and respond to emerging risks ignores the pillars of insurance which is centered on identifying risk that exists in the market. The section "Recommendations of the FSB TCFD" that specifically guides "Insurers and Asset Owners" should be stricken in its entirety. Allow market forces to exist where risk exists. Especially related to the power of regulators or regulatory bodies, abstemiousness should be the focus.	Disagree