

Please use this template to comment on the IAA Paper - Climate-Related Scenarios Applied to Insurers and Other Financial Institutions. The IAA invites comments on this paper, and on the questions set out below.

Comments are most helpful if they:

- (a) Are comments on the questions as stated;
- (b) Take full account of what will be addressed under the topics in other papers in the series of papers as stated in the cover memo;
- (b) Indicate the specific row or group of rows to which they relate;
- (c) Contain a clear rationale; and
- (d) Include any alternative that the IAA should consider, if applicable within the scope of the [Statement of Intent for IAA Activities on Climate-related Risks](#).

|  | Identification and instructions  |                                 |
|--|--|---------------------------------|
| Name of Individual:                                  | Please indicate if your comments are personal, or represent your organization:   |                                 |
| Name of organization                                 |  | Canadian Institute of Actuaries |
| Disclosure of comments:                              | Please indicate if your comments should be treated as confidential, and if so why:   | No                              |
| Instructions for filling in and sending the template | <p>Please follow the following instructions for filling in the template:</p> <ul style="list-style-type: none"> <li>⇒ Do not write in the yellow shaded cells</li> <li>⇒ Write in the white cells</li> <li>⇒ When commenting on a specific paragraph:                             <ul style="list-style-type: none"> <li>○ Please use a separate row for each paragraph, sub paragraph, or bullet.</li> <li>○ Please include the full reference to the row number(s) you are commenting on under the first column “Full row number reference”; e.g., Rows 223-225</li> <li>○ Please insert/append extra rows to this format as needed.</li> </ul> </li> </ul> <p>Please send the completed template by e-mail, attached in <u>MSWord format</u>, to <a href="mailto:climaterisk.comments@actuaries.org">climaterisk.comments@actuaries.org</a></p> |                                 |

Please note the separate [glossary](#) accompanying this paper, which the IAA will update as further papers on climate-related risks are developed.

|     | Specific Questions asked by the IAA Climate Risk Task Force   | Response   |
|-----|---|--|
| Q1. | Considering the previous two IAA papers <a href="#">Importance of Climate-Related Risks for Actuaries</a> and <a href="#">Introduction to Climate-Related Scenarios</a> , and the topics of papers to follow in this series (as outlined in section 6 of this paper),<br><br>Does it cover the right level of background information on climate change? | This third paper is well researched and draws heavily on FMA work (notably the UK IFA and Australian Institute of Actuaries). There is also reference to the CIA's research paper published in 2015 and the <i>Time to Act</i> public statement issued in 2019. The CIA appreciates the recognition.<br><br>The paper covers background information on climate scenarios in a comprehensive manner.                    |
| Q2. | Does it adequately cover the principles needed for application of climate-related scenarios to insurers and other financial institutions?   | The paper adequately covers the principles needed for application of climate-related scenarios to insurers and other financial institutions. The case studies in Section 5 help in understanding how to apply the principles when performing scenario modelling. Careful thought should be given to how assumptions chosen for the scenarios may not fully address all the principles, as noted in the comments below. |
|     | General Comments on the Paper   |  |

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|  | <p>The CIA is happy that the IAA's CRTF continues to develop its resources for all FMAs on the physical, transition, and legal and reputational risks of climate change. This third paper in the series has addressed issues that were raised by FMAs from the IAA CRTF's first paper.</p> <p>Notably, the CIA believes:</p> <ul style="list-style-type: none"> <li>* This third paper is well researched and draws heavily on FMA work (notably the UK IFA and Australian Institute of Actuaries). There are also references to the CIA's research paper published in 2015 and the <i>Time to Act</i> public statement issued in 2019. The CIA appreciates the recognition.</li> <li>* There is a breakdown by type of insurance with an interesting reference to health insurance (see detailed comments below)</li> <li>* There are interesting case studies on crop insurance and countries reliant on fossil fuels (Section 5). While relevant for certain markets, these may not be applicable to all FMAs.</li> </ul> <p>The CIA is looking forward to the opportunity to comment on the fourth paper from the IAA on the transition risk impacts on assets, since it relates to this third paper.</p> |
|--|---|

| Comments on specific content/wording in the Paper (rows have been numbered for easy reference) |   |  |
|--|---|--|
| Full row number reference  | Change proposed to the row(s) (markup preferred)    | Reason the change is needed (can be kept very brief or left blank if obvious from the change)  |
| Section 2.1.5<br>(starting on line 636)  | See comment on heath insurance in right-hand column | The assessment of climate risks should also include the potential impact of climate change on the delivery and access to care. We agree this is slightly different from offering insurance in the first place, but unlike other types of insurance based on financial compensation, health typically will involve providing care, and so providers are critical to the insurance offering. For instance, physical damage to critical health infrastructures (health providers) from extreme weather and ability to withstand damage to continue servicing its patients at times of urgent needs should be carefully evaluated. This naturally extends to ensuring access to care for more vulnerable populations during extreme weather. |

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| Section 1.4        | See comment on legal and reputational risks in right-hand column  | Legal and reputational risks are described as arising from the failure to enact certain policy changes and address financial and strategic risks via mitigation, adaptation, or disclosures. While this is true, another driver of legal and reputational risks is maladaptation and poorly designed climate action/response, which can be a barrier to climate action. This can be the case when climate response is performed without collective systems thinking which the IAA paper is referencing, whereby one organization mitigating its own climate risks causes new climate risks for another organization or community.  |
| Sections 1.2 & 1.3 | See comment on physical and transition risks in right-hand column | The paper talks about physical and transition risks that may be poorly correlated across both space and time, mentioning that a firm could be faced by strong national government policies on climate (high transition risks), and yet still face high physical risks due to inaction of other countries. In that same vein, while climate scenarios are aligned with specific global temperature targets, not all countries will experience the same global warming effect due to their geographical location. For instance, as Canada is said to warm up at twice the global rate, meeting the 1.5 degree Paris targets will equate for Canada to a 3 degree increase, pointing to the need to carefully interpret the temperature targets in climate scenarios. |