

EIOPA-BoS-19-421_Resolutions_to_Consultation_Opinion_Sustainable_Finance_Solvency_II 24/09/2019

Question 1: Do you agree that no change in the time horizon for capital requirements would be required to integrate climate change considerations?

Name of the organisation		Please elaborate.	Response from EIOPA
SD-M GmbH	No	The time horizon should be longer.	Noted.
ClientEarth	n/a	-	Noted.
Financial Guard Ltd	Yes	Changing to a longer horizon would be too onerous and disruptive a change in regulations. However, long-term implications can be contained in the current horizon, by using parameters that affect long-term cash flows and implicitly fair/market/model valuations.	Noted. Possible adjustments to data to allow for climate change is referred to in the opinion, as well as scenario analysis to assess uncertainties in the valuation over time.
German Insurance Association	Yes	Yes. We agree with EIOPA that climate risks do not materialize in one year, but over time. But we also believe that expanding the time horizon is not the solution as a longer time horizon could still not assess when and how strong solvency would be affected. Also for non-life and health business there is the possibility or respectively legal obligation to increase the premium. We therefore agree with EIOPA that it is not necessary to change the time horizon for capital requirements in order to integrate climate change considerations. Climate change considerations are already reflected in an implicit manner. Furthermore, such a change would contradict with one of the key Solvency II principles. Within the 1-year time horizon undertakings have to withstand shocks to happen with a 1 in 200 probability. Therefore, the risk of severe events, which could be caused by climate change, is already captured. Further, there are other risks e.g. for liability insurance, that have a very long claims' occurrence period. These risks are already covered by the current Solvency II framework and so are the climate risks. Hence, we are of the opinion that the undertakings are able to meet their obligations to policyholders over a 1-year period. We also agree with EIOPA that other tools might be more appropriate to capture impacts of climate change. For example, a regular adequate recalibration of the factors in the NatCat risk module can reflect climate change adequately.	Noted. Please note the reference in the opinion to the need for risk- based capital requirements.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	The Association of German Public Insurers (VöV hereafter, Verband öffentlicher Versicherer) welcomes the consultation on the role of sustainability within Solvency II. As Germany's second largest primary insurance provider with a strong regional presence, the group is committed to constructive dialogue in the interests of all market participants and of a stable European and global insurance sector. This response focuses on the integration of environmental, social and governance (ESG) factors into the underwriting process, which is particularly important for German public insurers. For a view on all questions of the consultation, the group refers to the statement of the German Insurance Association (GDV).	Noted.
FERMA - Federation of European Risk Management Associations	Yes	FERMA shares EIOPA's views that the current design of Solvency II capital requirements should:□ •rēmain risk-based and on a 1-year time horizon;□ •rēmain neutral to different types of risks and not impose sustainable investment incentives;□ •rīot introduce a separate risk module for sustainability risks as they already materialise through existing risk categories.	Noted.
German Association of Private Health Insurers (PKV)		We agree with EIOPA that climate risks do not materialize in one year, but over time. But we also believe that expanding the time horizon is not the solution as a longer time horizon could still not assess when and how strong solvency would be affected. Also for health business there is the possibility to increase the premium. We agree with EIOPA that it is not necessary to change the time horizon for capital requirements in order to integrate climate change considerations. Furthermore, such a change would contradict with one of the key Solvency II principles. Within the 1-year time horizon, undertakings have to withstand shocks to happen with a 1 in 200 probability. Therefore, the risk of severe events, which could be caused by climate change, is already captured. Further there are other risks that have a very long claims' occurrence period. These risks can be integrated in the current Solvency II framework and so can the climate risks. Hence, we are of the opinion that the current requirements are sufficient for their purpose, i.e. to ensure that undertakings are able to meet their obligations to policyholders over a 1-year period. We also agree with EIOPA that other tools might be more appropriate to capture impacts of climate change (see remarks made by GDV).	Noted.
Allianz SE	Yes	We agree that the one year time horizon of current capital requirements under Solvency II should not be changed. Capital requirements are an adequate tool to ensure that insurance entities have enough financial resources to cover immediate losses from sudden fluctuations in economic and real world risk factors.	
Investment & Life Assurance Group	Yes	We agree that it is possible to allow for climate change without altering the time horizon. ILAG considers that stress and scenario testing can be carried out within the current framework to illustrate the possible impacts of climate change through stressing both assets and liabilities.	Noted. See the referenceto scenario analysis in the opinion.

Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a	-	Noted.
Actuarial Association of Europe	Yes	the possible losses.	Noted. See content on scenario analysis in the opinion as well as to the need for regular recalibration of NAT CAT
European Savings and Retail Banking Group	Yes	General Comment to the Consultation ESBG welcomes the publication of the European Commission's action plan on financing sustaina-ble growth as sustainability is deeply entrenched within the values of our Association; therefore, we support the development of sustainable finance within the European Union. However, we would like to express our concerns about the timing. Not only is the absence of a clear view on the outcome at Level 1 on sustainable finance legislation (including for the frame-work/taxonomy) challenging, but the lack of legal definitions (e.g. of sustainability risk or factors, makes integrating sustainability risks and factors problematic) both from a better regulation and implementation point of view. There is, in our view, a risk of inconsistent implementation throughout the Union. With regard to sustainability factors, we agree that assessing the impact of investments on sustain-able factors is desirable. However, the lack of common definitions, methodologies and guidance on how to capture the effects of investments on sustain-able factors is desirable. However, the lack of common definitions, methodologies and guidance on how to capture the effects of investments on sustain-able factors is desirable. However, the lack of common definitions, methodologies and guidance on how to capture the effects of investments on sustain-able factors is desirable. However, the lack of common definitions (e.g. of sustainability factors makes examining and evalu-ating these factors challenging. Reply to Question1: The risks of climate change are long term. However, they can be accommodated with medium term models that include impacts on excess pollution charges or company costs arising from a transition process. We believe that the Standard Formula of the calculation of SCR should not be modified. It is essential to acquire further experience before changing capital requirements.	Noted.

	-	
EIOPA insurance and re- insurance stakeholder group	Yes	No change in the time horizon for capital requirements would be required to integrate climate change considerations. We also agree with EIOPA general do not materialize in one year, but over time. We are of the opinion that measuring and monitoring long-term risks is highly important, as climate change poses severe risks, not only for our s ecosystems, but for our long-term investments, insurance customers and retirement plans. Research shows that the returns pensions and saving lower in a world affected by climate change than in an economy which has taken action to mitigate these risks and losses. Investors increasingly environmental impact of their savings and understand the impact climate change will have on their long-term returns. Also substantial climate chard dramatically the insurance market offering and the customer protection. We agree that the impact of climate change in the long-term can be captured with complementary tools, such as risk and scenario analysis. We risks are better managed through management actions resulting from strategic business planning, such as changes to underwriting strategy, poli conditions, pricing, loss prevention requirements (underwriting area) and strategic and tactical asset allocation, taking into account sustainability qualitative level. These can also be done in the absence of statistically relevant quantitative data, such as time series of green investments (invest strategic business planning (and additional policy action if relevant).
Finance Watch	Yes	A first comment would be that there is a need to look beyond only climate change risks to environmental risks. Ecosystems and living organisms series of dramatic changes: pollution, ecosystem disruption and increased rate of extinctions. Our increasing impacts and depletion of our stock of severely testing the ability of the Earth to provide for people's' most basic needs. In 2009, the Stockholm Resilience Centre brought together 29 la scientists, who proposed a set of nine critical Earth-system processes with biophysical thresholds, or 'tipping points', called 'Planetary boundaries' thresholds could lead to irreversible environmental change, undermining the 'safe space for human development'. Four of them have already been biodiversity integrity, climate breakdown, land-system change and altered biogeochemical cycle. See ROCKSTRÖM et al, A safe operating space Nature, 2009.
Insurance Europe	Yes	No change in the time horizon for capital requirements would be required to integrate climate change considerations. In this respect, the insurance EIOPA that climate risks do not materialize in one year, but over time. It also believes that using a longer time horizon would not be an appropriat issue, as it would not help assess when and how solvency would be affected. If anything, a longer time horizon for the SCR would likely lead to o the industry and higher uncertainty in the SCR levels, especially due to the difficulty with climate change prediction. Moreover, the risk of severe events, eg those caused by climate change, is already captured in the capital requirements computations. In fact, wi current capital requirements calculations, undertakings must withstand shocks that happen with a 1 in 200 probability in a one-year time horizon. requirements are sufficient for their purpose, ie to ensure that undertakings can deal with severe unexpected shocks (losses) and still meet their policyholders over the following a one-year period. Insurance Europe also agrees that the impact of climate change in the long term could be captured with complementary tools, such as scenario including scenario analysis, should be suitable for the specific profile of the undertaking and represent only one of the potential tools that an under deal with sustainability risks.

A that climate risks in	
society and ngs depend on will be y want to consider the hange will affect e find that longer-term blicy terms and y considerations at a	Noted.
estment area).	
rios in order to facilitate	
s are experiencing a c of Natural Capital are leading Earth-system es'. Crossing these een crossed: ce for humanity,	Noted.
change is necessarily on and suggest it could	
nce sector agrees with ate solution to this over-capitalization of	
with respect to the a. Therefore, current r obligations to	Noted. See the reference to scenario analysis in the opinion.
analysis. These tools, lertaking could use to	

Assuralia	Yes	Yes, the sector agrees that no change in the time horizon for capital requirements would be required to integrate climate change considerations. The sector also agrees that the impact of climate change in the long term can be captured with complementary tools, such as stress testing and risk and scenario analysis. A longer time horizon for the SCR would likely lead to over-capitalization of the industry and higher uncertainty in the SCR levels, especially due to the difficulty with climate change prediction. In this respect, the insurance sector agrees with EIOPA that climate risks do not materialize in one year, but over time. It also believes that a longer time horizon would not be an appropriate solution as it would not help assess when and how solvency would be affected. In addition, insurance contracts with duration below one-year can be reprised at least once a year to incorporate updated information and expectations on climate change impact. With respect to the current capital requirements calculations, undertakings have to withstand shocks that happen with a 1 in 200 probability in a one-year time horizon. This means that the risk of severe events, caused by climate change, is already captured in these computations. Therefore, current requirements are sufficient for their purpose, i.e. to ensure that undertakings can deal with severe unexpected shocks (losses) and still meet their obligations to policyholders over a 1-year period.	Noted.
Caisse des Depôts Group	n/a	No views	Noted.
AMICE	Yes	We agree that the time horizon should not be changed and that complementary tools such as scenario analysis and stress testing would be more appropriate to capture impacts of climate change. EIOPA already spelled out in its paper the reasons for this. In our view, if the time horizon were to change, the Solvency II calibration would have to be reassessed, the possibility to include future management actions would have to be analysed as would the modelling of potential options and directions and the new developments. The current Solvency II framework already foresees the integration of any new evidence available by updating the parameters in the calculation of the best estimate of the insurance liabilities. Similarly, if a new catastrophic event occurred re/insurers would have to assess it and change policies where deemed necessary.	Noted.
GLOBAL WARNING	No	The climate change physical risks should not be considered at the company level, but macroeconomically at the sector level. It is systemic, global, complex and caracterized by uncertainty. The climate change transition risk is focused on the concept of a world carbon budget which, given our present trajectory, is going to shrink "comme neige au soleil", so to say. I agree with the ESRB, the NGFS, the Bank of England and the Banque de France that it is probably to late to have an orderly transition. We have to prepare for a disorderly transition. Risk will be great, but it will be holistic, global. And mostly, and contrary to public opinion, I think this widespread risk shall be shared by the states, and the taxpayers ; rather than by the life insurance companies, or the savers.	Noted.

Question 2: Do you agree that insurers should consider sustainability risks, and in particular climate change risks, in a forward-looking manner?

Name of the organisation	Question 2	2: If yes, how should this be incorporated into current or new requirements?	If not, please elaborate.	Response from EIOPA
SD-M GmbH	No		Forward-looking could much more unsecure than backward-looking consideration.	Noted.
		It is vital for (re)insurers to consider climate change risks in a forward-looking manner. This is partly because historical trends may no longer be a reliable indicator of future risks. However, it is also important because the actions taken by (re)insurers today may impact the sector in the long-term. This concept has already been recognised by the Bank of England.		
ClientEarth	Yes	We consider that EIOPA's approach of expressly clarifying existing provisions within Solvency II (e.g. the recommendations set out in their technical advice on integrating sustainability risks) is a good one. However, clarifying requirements must be complemented by effective regulatory oversight. Regulators must take a proactive approach to ensure (re)insurers comply with the requirements.		Noted. See the text of the opinion on valuation of liabilities and the reference to
		It is also important to recognise that solvency is only one element of financial stability. Accordingly, Solvency II alone is not sufficient to address all the issues that sustainability risks pose to financial stability. For instance, it is possible for insurers to remain perfectly solvent but cease to offer critical insurance products to society. This results in a protection gap which has implications for consumers and financial stability. Insurers also contribute to instability by facilitating activities that are expected to have severe macroeconomic impacts in the long-term (e.g. the burning of fossil fuels and climate change). Sustainability must therefore also be considered as part of EIOPA's work on macroprudential policy and systemic risk, which may require new prudential tools.		the protection gap, which can have a systemic impact.
Financial Guard Ltd	Yes	Projections, identifying climate a top-down risk map, with higher level risk variables (e.g. average global or regional temperatures, net GHG emissions, total energy requirements) in a hierarchy which leads to more detailed risk variables (wind speeds, local temperatures, rainfall), and at a lower level of detail specific assets (floods for specific areas, etc.) types invested in and liability risk taken. Furthermore, scenario analysis dependent on projected societal changes should be mandatory reporting requirements in order to gather views and methodologies.		Noted. The analysis of transition risk may consider such
		Emphasis should be made on sensitivities to human actions, i.e. not just projecting the effects of climate change under current actions It is necessary to incorporate estimates of probabilities and effects for different actions: carbon tax, cap on carbon output, changes in diet (either legal restrictions or cultural behavioral changes), etc.		sensitivities.
		Yes.		
		We agree with EIOPA that undertakings should consider sustainability risks and climate change risks adequately. This encompasses a forward-looking-approach, which is already required as part of the ORSA: Article 45(1)(a) of the Directive 2009/138/EG demands a forward-looking ap-proach that covers all risks and also potential changes in the undertaking's risk profile.		Neted Cost the text
		EIOPA proposes to develop and conduct long term scenario analysis and stress testing. In this regard, EIOPA's expectations need to be clarified. Especially, it remains unclear how effects of sustainability risks or climate change risk shall be separated from other factors.		Noted. See the text of the opinion on the valuation of liabilities.
		We further agree with EIOPA that historical data on its own cannot predict climate change risks. However, it needs to be taken into account, that forward looking company data (pathways) is not available in a systematic manner and of sufficiently high quality. There are also major data lacks and irregularities for as-is data. From today's perspective, there is not much substantial guidance available on projecting conditions such as in-surance uptake / exposures or vulnerabilities into the future, for instance for a period 2030-2040.		
German Insurance Association	Yes	Either regulation enforces consistent pathway reporting for CO2-relevant sectors or insurance companies will depend on expensive consultants for expert judgements (see development in France w.r.t. article 173). It is of crucial importance that any regulation for the finance sector is and develops in line with industry regulation.		See the text of the opinion on NAT CAT modelling.
		Under certain conditions analysing the outcome of different speculative, forward-looking approaches could be a useful tool for an undertaking's risk management, ORSA or governance (see our answer on question 3 below). However, these approaches should not result in amended capital requirements within Solvency II.		g.
		Third-party cat models reflect the current climate situation – partially in a forward looking manner. These models are updated on a frequent basis (every 3 to 5 years) and are state-of-the-art. Undertakings already model the current risk in order to buy adequate reinsurance cover. Further, rein-surance undertakings need state-of-the-art models for their pricing. Implic-itly, vendor models reflect climate change because of the regular updates.		
		Generally, we would like to point out that according to article 44 of the Solvency II Directive, undertakings have to identify, assess, manage and monitor the risks to which they are or could be exposed to. This does not exclude sustainability risks and climate change risks. Additionally, Article 29 of the Solvency II Delegated Regulation states that expected future developments in the external environment – including environmental de-velopments – have to be taken into account for the calculation of the best estimate, if these developments have a material impact. Therefore, we do not see the need to amend existing or to introduce new requirements. Re-garding the implementation of a forward looking approach, undertakings should be given sufficient flexibility to reflect their specific business model. Considering sustainability risks in a forward looking manner is a difficult task for small or medium sized undertakings. A proportionate approach is needed.		
Association of German Public				
Insurers - Verband öffentlicher Versicherer (VöV)	n/a			Noted.
FERMA - Federation of European Risk Management Associations	n/a			Noted.
German Association of Private Health Insurers (PKV)	n/a			Noted.
Allianz SE	Yes	Yes, but in an strategic and qualitative manner.		Noted.

Investment & Life Assurance Group	Yes	ILAG agrees that sustainability risks should be incorporated in a forward-looking manner. We consider that the ORSA is the appropriate place to consider the impacts of sustainability risks and that it is appropriate to explore scenarios that relate to the insurer's exposure within that report. Given the extent of potential outcomes of climate change as well as the range of available models , ILAG does not consider it is time to allow for these effects explicitly within best estimate liabilities yet.		Noted.
/ienna Insurance Group AG Wiener Versicherung Gruppe	n/a			Noted.
Actuarial Association of Europe	Yes	All material and relevant risks, including climate change risks, should be considered in a forward-looking manner as is prescribed in the Solvency II framework for the ORSA. Therefore, the forward-looking treatment of sustainability risk and more general sustainability considerations are already incorporated in the current Pillar 2 requirements, such as the ORSA and the System of Governance. New requirements in this regard, whether in the Directive or in Delegated Regulation, are not necessary. Depending on the materiality of an undertaking's exposure, sustainability, and in particular climate change risks, can already be reflected in more specific, and potentially more severe, stress and scenario testing than heretofore. This is already required: for example •the Directive, in article 45 (2) says each undertaking "shall have in place processes which are proportionate to the nature, scale and complexity of the risks inherent in its business and which enable it to properly identify and assess the risks it faces in the short and long term and to which it is or could be exposed" •The guidelines on own risk and solvency assessment state in Guideline 7: "The undertaking should provide a quantification of the capital needs and a description of other means needed to address all material risks irrespective of whether the risks are quantifiable or not. Where appropriate, the undertaking should subject the identified material risks to a sufficiently wide range of stress tests or scenario analyses in order to provide an adequate basis for the assessment of the overall solvency needs."		Noted.
European Savings and Retail Banking Group	No		We believe that it is essential to have a definition of sustainability risk in order to evaluate the implication of this risk. In general, the ESG risks supplement the traditional financial view and allow a better knowledge of the evolution of the risk incurred. It is important to highlight that there is a lack of standard information from the companies' side and additionally a concentration of ESG providers. These two facts make it difficult to assess these risks correctly. EIOPA should be aware that sustainability risk is a new subject, which is evolving very quickly but there are many aspects under development, where a consolidated standard is not yet available.	Noted. EIOPA notes the evolving nature of the subject of sustainability and that these developments extend beyond the insurance sector. EIOPA's Opinion specifically references the work performed by the IEA and IPCC as relevant and beneficial for undertakings to consider when assessing sustainability considerations.
EIOPA insurance and re- insurance stakeholder group	Yes	we agree that insurers should consider sustainability risks, and in particular climate change risks, in a forward-looking manner, especially when these risks are expected to have a future material impact on an insurer's balance sheet. Moreover, this becomes important because historical trends may no longer be a reliable indicator of future risks. Also, the actions taken by (re)insurers today may impact the sector in the long-term, as recognised by the Bank of England recently. We believe that sustainability risks can already be incorporated into the current Solvency framework and that no new requirements are necessary. In fact, according to Art. 44 of the Solvency II Directive, undertakings already have to identify, assess, manage and monitor the risks to which they are or could be exposed. This includes sustainability risks. Anyway, as we see sustainability related matter developing in future years, the calibration of capital requirements should be reviewed regularly and changed if needed to reflect properly the changes in the level of risk. Regarding the implementation of a forward-looking approach, undertakings should be given sufficient flexibility to reflect their specific business model and integrate sustainability risks in their relevant processes (e.g. in the ORSA) and policies (like UW, investment and risk management). With respect to long term scenario analysis and stress testing, EIOPA's expectations need to be clarified. In particular, we stress that: □ \!\! In the inplementation be enough to predict climate change risk, forward-looking company data (pathways) is not available in a systematic manner and is not of sufficiently high quality. \!\!\!\!\!There are no agreed key scenario assumptions and no consensus on how to project key variables, including insurance uptak/exposures and vulnerabilities into the future, for instance for a period 2030-2040. One approach could be to combine past data with appropriate quantitative climate change modelling and scenario analysis for an assessment of the full r		Noted. EIOPA recognises the challenges presented by climate change and that a complete, quantified assessment of such risks may not be possible at this time. As mentioned in the Opinion, EIOPA nevertheless believes beneficial work can be undertaken to commence the assessment of the materiality of such risks, to ensure the sector is well placed for their emergence.

Finance Watch	Yes	It is important for environmental and climate related risks to be considered in a forward-looking manner. While long-term investors have liabilities beyond 20-30 years, this does not mean that their time frames for investment are similarly long term. Undertakings do not yet appear to properly take into account long-term risks, including stranded assets, climate- and environmental-related risks. Examples of why this is the case include that asset allocation decisions based on a historical view of risk, which generally prevents undertakings from taking into account systemic future events. As performance is generally evaluated on a quarterly basis it does not incentivise a proper consideration of medium- to long-term risks. It rather increases pressure to deliver short-term returns (furthermore, 2° Investing Initiative and the Generation Foundation identified four constraints on long-term analysis (beyond 3-5 years): a shortage of data from companies on their long-term plans, the high cost and low benefit of long-term analysis, a lack of standardised frameworks for long-term risk analysis, and a lack of demand from investors). Investment practice is also guided by measurement of short-term performance against peers, where risk is defined in relation to historic short-term volatility and divergence from a benchmark index — not by science-based analysis of physical risks. See SILVER, N., Blindness to risk: why institutional investors ignore the risk of stranded assets, Journal of Sustainable Finance & Investment, 7:1, 99-113, p.111.	
Insurance Europe	Yes	In principle Insurance Europe agrees that insurers should consider sustainability risks, and in particular climate change risks, in a forward-looking manner, especially when these risks are expected to have a future material impact on the balance sheet of the insurance company. The insurance industry notes that sustainability risks are already incorporated into the current Solvency framework and that no new requirements should be implemented. In fact, according to Ar. 44 of the Solvency II Directive, undertakings already have to identify, assess, manage and monitor the risks to which they are or could be exposed. This includes sustainability risks in their relevant processes and business decisions. The principle of proportionality also needs to be reflected in the consideration of sustainability risks in a forward-looking manner: the size and maturity of the undertakings' obligations, the risk level connected to those obligations, the nature and the regionality of the insured to allow undertakings to reflect and integrate sustainability risks in a forward-looking manner: the size and maturity of the undertakings' obligations, the risk level connected to those obligations, the nature and the regionality of the insured risks need to be considered. Sufficient flexibility must be maintained to allow undertakings to reflect and integrate sustainability risks insurer should decide whether it is the right instrument to capture climate change risk and reflect the undertaking's individual risk situation adequately. While the ORSAs may have a forward-looking perspective with regard to material sustainability risks, insurers should decide whether it is the right instrument to capture climate change risks and the sucremative base asters the insurance sector stresses that: Nith respect to both long-term scenarios in the context of a separate workstream, namely the currently biennial European stress testing exercise. The insurance industry believes that the turbe astress testing exercise. The insurance industry believes th	
Assuralia	Yes	In principle the sector agrees that insurers should consider sustainability risks, and in particular climate change risks, in a forward-looking manner, especially when these risks are expected to have a future material impact on an insurer's balance sheet. The insurance industry notes that sustainability risks are incorporated into the current Solvency framework and that no new requirements should be implemented. In fact, according to Art. 44 of the Solvency II Directive, undertakings already have to identify, assess, manage and monitor the risks to which they are or could be exposed. This includes sustainability risks. The forward-looking approach should focus on stress testing. Stress testing at European level would facilitate risk identification. The standardization would create a level playing field. EIOPA could fully develop the scenarios with appropriate consultation with stakeholders. The scenarios need to be easy to implement and consist out of well-defined shocks. The scenarios should take into account the geographical specificities related to sustainability risk, as is currently the situation in the standard formula for the NATCAT modules. This is because the impact of climate change will differ across the geographical areas, e.g. no risk of mudslides in the Netherlands and no risk of a riase in sea level in Austria (at least not directly). The stress test on sustainability risks in their ORSA. However, in the ORSA, undertakings should maintain sufficient flexibility to reflect and integrate sustainability risks in line with their specific business model.	
Caisse des Depôts Group	n/a		
AMICE	Yes	We agree that re/insurers should consider sustainability risks and in particular climate change risks in a forward-looking manner through the adoption of long-term scenario analysis. Sustainability risk is mainly an emerging risk which has to be dealt with firstly via pillar 2 requirements such as the ORSA and contingency plans if needed. If the emerging risk becomes more tangible, the insurer would revisit their terms and conditions, reserving and pricing policy and would integrate the emerged risk within its risk appetite statement. We believe that there are significant aspects of this proposal which are already captured in the current regulatory regime. In our view no new provisions are needed in order to address sustainability risk.	
GLOBAL WARNING	Yes	Climate-change transition risk is not integrated in Solvency II, which is built upon mainstream economic wisdom, unable to undersand the specific role of energy in economic growth. See my analysis on French twelve leading life insurers SFCR reports, and on life insurance institutions. DEUX SONS DE CLOCHES SUR LA MATÉRIALITÉ DU « RISQUE CLIMAT » DANS L'ASSURANCE VIE FRANÇAISEou la dissonance cognitive que révèle l'analyse des rapports de solvabilité par l'Observatoire 173 Climat – Assurance Vie – juillet 2019 https://theshiftproject.org/wp-content/uploads/2019/07/2019-07_Observatoire-173_Deux-sons-de-cloche-sur-la-matérialité-du-risque-climat_The-Shift-Project.pdf The expert human resources and means of analysis and modelling regarding these dramatic transition risk should be much more substantial than what is deployed in present time. Efforts are truly ridiculous, given the climate change threat.	

Noted.
Noted.
Noted.
Noted
Noted. Noted.
Noted. See reference to the need for scenario analysis

Question 3: Do you agree that long-term scenario analysis in risk management, governance and ORSA should enable insurers to develop a forward-looking approach with regard to sustainability risks, and in particular climate change risks?

Image tasks not one frast has been wheeseed in nevert history, so historical data's use is limited to seeing current trends, i.e. is limited to projecting results under current managing the instagenest actions?. Financial Guard Ltd No Financial Guard Ltd No While the insurance, or wider financial, industries are likely able to develop approaches that comparise can use for their own fisks, EIOPA and similar regulators do not histocial data's use is limited to seeing current femalagi characterization. Financial Guard Ltd No While the insurance, or wider financial, industries are likely able to develop approaches that companies can use for their own fisks, EIOPA and similar regulators do not histocial data's use is limited to seeing current financial. Financial Guard Ltd No While the insurance or wider financial, industries are likely able to develop approaches with endots (in industrie). No while the insurance in the industries of the insurance in the industries of the industries of the industries of the insurance in the industries of the industries of the industries of the insurance in the industries of the industris of the industries of the industries of the indus			Please elaborate.
Pent/yes, pent/y no. Yes on for company risks, nor for larger social initia. The function control is a properticing of management and research to a different time of the analysis is not one by right social and initiating on the initiation of the analysis must because often rais spicially rely on historical data is use in limited to seeing ourrent trends, i.e. is limited to projecting results under current managing the first is not one first has been vitrosesed in a trend to a set of the analysis must because of the analysis must because of the analysis must because on how these "Base (current mends, but a lager portion of the analysis must because on how these "Base (current trends in order to decide methods to the creation of these taker, necessary to ware-looking approach as a first because to rearrant prevent in the unit or the intervent in a sequence current trends. Not a lager portion of the analysis must becaus on how these "Base (current trends) in order to decide methods to the creation of these taker, necessary to ware-looking approach as a context of the analysis must because the method must be accurated and approach as a context on the managemet trends. The issue to the management methods of the analysis must because the method must be accurated and approach as a context on the management trends. The analysis must because the method issue at the methods of the industry. Financial Guard Lid No While the insurance can use the induction approach as a trend in the insurance can be insure to induction approach as a method is to the use of the instrume trends. The insure instrumance method society is an other instrument the isociated instrument amagement meets. Curr view is that accurate must be approach as a trend to insurance can be instrumed to instrument the isociated instrument instrumace method society is an othereas instrument method is			
Ensuring Guard Led In a protection of climate must necessarily be different from other scenario analysis done by (re)insurent bacause other mixes bypically rely on hational data during in an algoment machine action in the analysis must locate on the machine action in the analysis must locate on the machine action in the analysis must locate on the machine action in the machine action in the analysis must locate on the machine action in the machine action ac	ClientEarth	Yes	
which is comprehensive and not only focused on suistainability risks. Insurance is a long-term oriented business model and usually takes all long-term developments incomentations of the provide is the strated ad assets, energy sector, qualitative assessments etc. which is comprehensive and not only focused on suistificated assets, energy sector, qualitative assessments etc. The focus now is more on learning, being close to the business Long term scenario analysis could support the development of a forward-looking approach whith regard to sustainability and climate change risk. In general we do not think that there is an awareness gap at insurers or lack of a forward-looking approach that needs to be miligated with com-pulsory scenario analysis could b new and enhancing existing forward-looking approachs. However, there can be other tools and solutions which are more suitable for an insurance undertaking. Therefore the use of scenario analysis. Sould be the institution in the company tisse and to use the should be no business model. Long-term scenario analysis a undertaking should be free to establish suitable approaches with regard to sustainability risks and to there should be no business model be approaches with regard to sustainability risks and to there should be no business inclusion to implement such ong-term scenario analysis. Depending on the risk stuation, the company risk is should not be prolonged or tied to a sustainability risks will materialise over a longer time period. However, insurance companies will gradually adapt to changes, in particular climate change risk. For example be covered in the ORSA will not set an advision scenario analyses. A qualitative assessment would be less precise as an mark factors y undertaking's risk and to numeration and will not result in more precise data. On the contrary, the as-sessment would be less precise as many factors y undertaking's risk and solverey situation in	Financial Guard Ltd	No	The forward-looking approach for climate must necessarily be different from other scenario analysis done by (re)insurers because other risks typically rely on historical data climate risk is not one that has been witnessed in recent history, so historical data's use is limited to seeing current trends, i.e. is limited to projecting results under current a managing the risk through potential mitigating "management actions". The true forward-looking analysis of climate risk must use historical data to show current trends, but a larger portion of the analysis must focus on how these "Base (current change via different human / societal actions. This projection of hypothetical futures must form the basis of managing climate risk, either at a (re)insurance company level fevel in order to decide methods for the creation of these later, necessary forward-looking approaches. While the insurance, or wider financial, industries are likely able to develop approaches that companies can use for their own risks, EIOPA and similar regulators do not har societal level. This is because the remit of each regulator is to insure the functioning and solvency of its industry. As described above, the answer to the question is "yes, the forward-looking approach will meet individual (re)insurance company risk management needs," but at the same forward-looking approach as done for other insurance risk will be insufficient to meet the societal climate risk management needs."
which is comprehensive and not only focused on suistainability risks. Insurance is a long-term oriented business model and usually takes all long-term developments incomentations of the provide is the strated ad assets, energy sector, qualitative assessments etc. which is comprehensive and not only focused on suistificated assets, energy sector, qualitative assessments etc. The focus now is more on learning, being close to the business Long term scenario analysis could support the development of a forward-looking approach whith regard to sustainability and climate change risk. In general we do not think that there is an awareness gap at insurers or lack of a forward-looking approach that needs to be miligated with com-pulsory scenario analysis could b new and enhancing existing forward-looking approachs. However, there can be other tools and solutions which are more suitable for an insurance undertaking. Therefore the use of scenario analysis. Sould be the institution in the company tisse and to use the should be no business model. Long-term scenario analysis a undertaking should be free to establish suitable approaches with regard to sustainability risks and to there should be no business model be approaches with regard to sustainability risks and to there should be no business inclusion to implement such ong-term scenario analysis. Depending on the risk stuation, the company risk is should not be prolonged or tied to a sustainability risks will materialise over a longer time period. However, insurance companies will gradually adapt to changes, in particular climate change risk. For example be covered in the ORSA will not set an advision scenario analyses. A qualitative assessment would be less precise as an mark factors y undertaking's risk and to numeration and will not result in more precise data. On the contrary, the as-sessment would be less precise as many factors y undertaking's risk and solverey situation in			
Insurers - Verband öffentlicher n/a Versicherer (VöV) n/a FERMA - Federation of n/a European Risk Management n/a Associations n/a German Association of Private n/a	German Insurance Association	n/a	In general we do not think that there is an awareness gap at insurers or lack of a forward-looking approach that needs to be mitigated with com-pulsory scenario analysis. A already compulsory and implemented, due to ORSA. Therefore the use of scenario analysis should be scaled to the individual risk profile of the undertaking. Undertakings need sufficient flexibility to develop a forward looking approach which is most suitable for their specific business model. Long-term scenario analysis could be new and enhancing existing forward-looking approaches. However, there can be other tools and solutions which are more suitable for an insurance undertaking. Therefore establishing uniform requirements for long-term-scenario analysis andertakings should be free to establish suitable approaches with regard to sustainability risks and undertaking. Should be no obligation to implement such long-term scenario analysis. Depending on the risk situation, the company itself should decide whether such analyses are is currently, the ORSA already has to cover forward-looking assessments (timeframe planning period of the company). In our view, this should not be prolonged or tied to a s sustainability risks and let the undertaking. Sea-level rise will continue beyond the time covered in this ORSA and more recent estimations will be is relevant. Extending the time period covered by the ORSA would not result in more precise data. On the contrary, the as-sessment would be less precise as many factors wi undertaking's risk and solvency situation in later years cannot be antic-ipated today. Long-term developments can only be and are reflected by insurance undertakings by c developments. To strengthen this ability, undertaking need sufficient flexibility. With regard to proportionality, it should be possible for low-risk insurers not to prepare complex scenario analyses. A qualitative assessment should suffice here. Furthermore relevant for an entity, there should not be an additional request to a forward-looking analysis.
European Risk Management n/a Associations Private German Association of Private p/a	Insurers - Verband öffentlicher Versicherer (VöV)	n/a	n/a
	European Risk Management Associations	n/a	Future evolution of climate change is undoubtedly a long-term trend and will be factored into the SCR by the regular recalibration of volatility factor for relevant line of busin
	German Association of Private Health Insurers (PKV)	n/a	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.

	Response from EIOPA
	Noted.
	Noted.
data for calibration. However, ent assumptions, but not to	
rrent action) trend lines" would evel for its own risk, or at a societal	Noted. EIOPA recognises the challenges presented
ot have the mandate to do this at a	by climate change however must stress the opinion considers
same time the answer is, "No, the	the quantification of risks, in the Solvency II context.
extension of forward-looking	
etal level.	
A all come with a holistic view nto consideration. Risk ness and testing various methods. sis. A forward-looking approach is ld be a helpful tool in developing efore, we would refrain from d climate change risk. Furthermore, are helpful or not. o a specific duration. We agree that nple, a potential sea-level rise can I be included in the next ORSA if ors which can contribute to the by constantly adapting to ongoing ermore, if sustainability risks are not SA is not suitable to trigger this kind Europe perform climate research ge on their balance sheet. However,	Noted. EIOPA recognises the need to strike a balance between achieving a harmonised approach to assessing the impact of climate related risks, while also facilitating more individual and tailored assessment of the undertaking specific impacts within the ORSA
	Noted.
ousiness.	Noted.
	Noted.

Allianz SE	Yes	The question implies that currently no forward-looking approach on sustainability and climate change risks is in place. We doubt that this is correct in general. Risk management, governance and ORSA all come with a holistic view. Insurance is a long-term oriented business model and usually takes all long-term developments into consideration. Risk management is focused on specific topics like stranded assets, energy sector, qualitative assessments etc. The focus now is more on learning, being close to the business and testing various methods. Long term scenario analysis could support the development of a forward-looking approach with regard to sustainability and climate change risk. Undertakings need sufficient flexibility to develop a forward looking approach which is most suitable for their specific business model. Long-term scenario analysis could be a helpful tool in developing new and enhancing existing forward-looking approaches. However, there can be other tools and solutions which are more suitable for an insurance undertaking. Therefore, we would refrain from establishing uniform requirements for long-term-scenario analysis as undertakings should be free to establish suitable approaches with regard to sustainability risks and climate change risk. Furthermore, there should be no obligation to implement such long-term scenario analysis. Depending on the risk situation, the company itself should decide whether such analyses are helpful or not.	Noted. EIOPA recognises the need to strike a balance between achieving a harmonised approach to assessing the impact of climate related risks, while also facilitating more individual and tailored assessment of the undertaking specific impacts within the ORSA
Investment & Life Assurance Group	Yes	ILAG agrees that long-term scenario analysis will enable insurers to develop a forward-looking approach. However, ILAG believes that the extent to which sophisticated models are required should be dependent on the complexity and size of an insurer's exposures to those risks. ILAG does not believe that it would be appropriate to mandate complex scenarios for all insurers, as this would be disproportionate and costly for smaller insurers.	Noted. EIOPA recognises the principle of proportionality as a key element of Solvency II. This has been explcitly reflected in the opinion.
Vienna Insurance Group AG	n/a		Noted.
Wiener Versicherung Gruppe Actuarial Association of Europe	Yes	Forward-looking analysis is already now a core element of the risk calculation and management of the insurance balance sheet (including SII s shocks). Recognisable (including sustainability) risks the undertaking is exposed to will be considered using short-term scenarios or suitable stress tests. Indeed, forward-looking is usually based on 3 to 5 years balance sheet projection which is online with insurer's business plan. Long term qualitative and, in certain circumstances, quantitative scenario analysis should form part of undertakings' strategic planning and risk management activities, reflecting risks likely to evolve and emerge in the long term, including sustainability. Finally, almost every risk is accompanied by corresponding opportunities, which are often disregarded when focussing on sustainability risks in isolation	Noted.
European Savings and Retail Banking Group	Yes	Yes, we agree with this approach. However, it is essential to have more details and consolidated methodologies to do it. In addition, the implications of climate change related to the type of company may differ (life vs. non-life).	Noted. EIOPA recognises the need to strike a balance between achieving a harmonised approach to assessing the impact of climate related risks, while also facilitating more individual and tailored assessment of the undertaking specific impacts within the ORSA
EIOPA insurance and re- insurance stakeholder group	Yes	Long-term scenario analysis in risk management, governance and ORSA should enable insurers to develop a forward-looking approach with regard to financially material sustainability risks. We find that there is a need to speed up the development of methodologies and metrics to ensure consistent measurement of many of the climate and environmental issues. However, undertakings need sufficient flexibility to develop a forward-looking approach to deal with sustainability risks within the ORSA. ORSA is an important tool for insurance undertakings and enough flexibility should be allowed so that it can remain their own tool and, in that way to ensure the best suitability for the possible new risks. The analysis of sustainability risks is dependent on the company-specific strategy and risk assessment. Therefore, the measurement and quantification of the effects of sustainability risks should consider undertakings' differences with respect to the materiality of climate change effects	Noted. EIOPA recognises the need to strike a balance between achieving a harmonised approach to assessing the impact of climate related risks, while also facilitating more individual and tailored assessment of the undertaking specific impacts within the O
Finance Watch	Yes	An essential part of this is ensuring that sufficient relevant data is sought out by undertakings and used in long-term scenario analysis. Governance disclosures should specify whether the company's approach to sustainability risks is consistent with IPCC (or other relevant, science-based, credible third-party) targets.	Noted. The opinion also highlights the importance of disclosure.

Г			1
Insurance Europe	Yes	Long-term scenario analysis in risk management, governance and ORSA could enable insurers to develop a forward-looking approach with regard to financially material sustainability risks. However, insurers should have the possibility to decide whether and how to incorporate a forward-looking approach, especially within their ORSAs. In particular, undertakings need to have full flexibility to reflect: - Differences in time horizons: climate change has a longer time horizon compared to that of long-term scenario analysis in risk management, governance and ORSA Company specificities: the analysis of sustainability risks is dependent on the company-specific strategy and risk assessment. The measurement and quantification of sustainability risks is necessary only when these effects are financially material for the undertaking. With regard to proportionality, it should be possible for small insurers with simple risk profiles not to prepare scenario analyses at all. A qualitative assessment, with the possibility to use scenario analysis, should be sufficient in this case. This considered, the insurance sector notes that it might be useful for the sector to have access to a set of non-binding high-level principles to help each insurer determine whether and how to incorporate sustainability risks in its risk management, governance and ORSA. In general, the insurance industry notes that, given the long-term horizon of sustainability risks, a qualitative approach is equally valuable for their analysis in risk management, governance and ORSA. While financially material sustainability risks can be considered both from a qualitative and quantitative view, the undertaking should decide which quantitative or qualitative tools are most appropriate to consider sustainability risks. In particular, while the ORSAs may have a forward-looking perspective, each insurer should decide whether it is the right instrument to capture climate change risks that will material so ver a longer time. This will depend on the insurer's strategy,	Noted - EIOPA recognises the challenges in achieving a common understanding of climate risks, while not impinging on the flexibility within the ORSA. The Opinion recognises that a qualitative assessment may be appropriate in as a first step.
Assuralia	Yes	On top of the obligatory stress testing, optional long-term scenario analysis in risk management, governance and ORSA could enable insurers to develop a forward-looking approach with regard to financially material sustainability risks. For this to be possible undertakings, need sufficient flexibility to develop a forward-looking approach to deal with sustainability risks within the ORSA. EIOPA's expectations with respect to long-term scenario analysis and stress testing need to be clarified. Sustainability risks could be considered in the ORSA. Sustainability risks can be considered both from a qualitative and quantitative view. However, the time horizon of sustainability risks is much longer than the other risks a company assesses in its ORSA based on its risk model. Therefore, sustainability risks should not necessarily be considered from a quantitative approach. Given the horizon of sustainability risk, a qualitative approach could be equally valuable to complement the ORSA analysis. Expected short-term impact of sustainability could be integrated in a more quantitative way in the ORSA based on the EIOPA stress test scenarios or company-made scenarios. This considered, the insurance sector notes that it will be useful to have access to a standardised set of principles that allow each insurer to decide how to incorporate sustainability risks in risk management, governance and ORSA, in line with its specific business profile and without impeding a company-specific ORSA. With respect to long-term scenario analysis and stress testing, EIOPA's expectations need to be clarified. In particular, the insurance sector stresses that: It is unclear how to separate the effects of sustainability risks (or climate change risk) from other factors. While historical data is not enough to predict climate change risk) forw other factors.	Noted. EIOPA recognises the challenges in achieving a common understanding of climate risks, while not impinging on the flexibility within the ORSA. The Opinion recognises that a qualitative assessment may be appropriate in as a first step.
		There is not substantial guidance available on projecting key variables, including insurance uptake/exposures and vulnerabilities into the future, for instance for a period 2030-2040.	
Caisse des Depôts Group	n/a	No views	Noted.
AMICE	Yes	Yes, see also the previous answer. However, sustainability risk is a risk which could materialise over the course of many years and possibly decades. Given that the ORSA projects the solvency positions over a planning horizon of 3 to 5 years, many assumptions would have to be made in order to work out long-term scenarios. Assumptions have to be made regarding behaviour of consumers, on the technological innovations, etc. This would be very challenging and the resulting outcome could be very diverse. Merely referring to scenarios as presented by the various supranational organisations is not sufficient. Embedding long term scenario analysis in risk management, governance and ORSA processes should enable insurers to develop a forward-looking approach with regard to sustainability risks, and in particular climate change risks. Applying consistent scenarios would help insurers to assess the climate change related risks they are exposed to and to inform business planning and strategy. We believe that it is essential that Member States develop physical impact scenarios, consistent with latest research and detailed for the main risk events (e.g. flood, heatwaves, sea level rise) so that insurers can assess their own risk exposure starting from a common framework.	Noted. EIOPA notes the challenges presented by both the uncertainty and timeframe of the emergence of climate change.
GLOBAL WARNING	No	Forward-looking scenarios is a very useful strategic tool. Can they be normalized, in order to facilitate comparison ? This is a contradiction in the TCFD recommendation regarding : scenario analysis on the one hand ; comparability on the other hand. See THE SHIFT PROJECT forthcoming report, in partnership with AFEP association of French large corporate, on The Shift Project website on scenarios energy&climate. On the temptation of using standard scenarios, as in the Bank of England climate scenario, see my post : STRESS TEST CLIMAT : L'ESSENCE DU RISQUE DE TRANSITION PRECEDE SON EXISTENCE https://www.linkedin.com/pulse/stress-test-climat-lessence-du-risque-de-transition-precede-lepetit/). These standard scenarios considered as stress tests, very static (shocks), should be proposed with caveat. The theoretical foundations of the "stranded assets" theory has worrying weaknesses. Besides, the narrative provided for the oil sector stranded assets is simplistic, and does not take into account economic history, especially the 1970s oil crises. I do think that other kind of global macroeconomic scenarios should be considered : -on the oil supply (forthcoming work on GLOBAL WARNING 0 C-APEX 2025 scenario) -on the international trade, regarding a generalized import carbon taxes . This is the reason why I have launched the RISKERGY project six years ago, and decided to create Beyond Ratings in the following years.	Noted.

Question 4: What are your views on incorporating a standardised set of quantitative climate change scenarios in the ORSA, e.g. derived from the IPCC representative concentration pathways (RCP) which are likely to evolve over time? Can you please elaborate on which scenarios you would use and which time span should be covered by such scenario analysis, specifying your approach for the valuation of assets, liabilities and your own solvency assessment (for standard formula and internal model users)?

Name of the organisation	Please elaborate.	Response from EIOPA
SD-M GmbH	see above	Noted
ClientEarth	We consider that standardisation would contribute to consistency and comparability of firms' scenario analyses.	Noted
Financial Guard Ltd	Requirement of IPCC scenarios should be a requirement, at least to be considered, and if IPCC scenarios are not implemented alternative ones should be reported and justified (essentially a partial internal model for climate, but only for ORSA and not requiring regulatory approval). However, the RCP variables are too broad, describing scenarios risk variables that are unhedgeable by a single company. Indeed, we find nothing in the RCP scenarios which map directly onto company parameters affecting valuation of assets, liabilities or own solvency. Thus, requiring these scenarios only will make this a check-box exercise leading to little or no to management actions to combat / mitigate climate risk at a company level, nor to add to the societal efforts to combat climate risk. As a standalone requirement, these isolated scenario requirements would provide little value. Combined with government-sponsored programs for "green" activities, there could be value, but required scenarios would then likely be specified in the governmental program. More effort / development should be made to interpret the IPCC scenarios to insurers, or to create new ones as a standard.	Noted. EIOPA is of the opinion that further work is needed to define a consistent set of quantitative parameters that could be used in climate change- related scenarios that insurers can then adopt as appropriate in their ORSA, risk management and, governance practices and ORSA. However, EIOPA also recognises that other parameters will depend on the specificities of each undertaking.
German Insurance Association	Generally, we would like to point out that scenarios are evolving and are no prognosis but one possible future pathway. Hence, it is reasonable to use a number of scenarios to reduce reliability on single providers and also reduce sensitivity to assumptions and modelling approaches. The proposed IPCC representative concentration pathways could be a good starting point for the development of own scenarios that the undertaking might use in its ORSA. However, each undertaking should be free to develop and apply the approach which is deemed most suitable for the undertaking's risk profile	Noted.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	Noted.
FERMA - Federation of European Risk Management Associations	For small and less complex insurers like captives, EIOPA's proposals for a forward-looking approach with regard to sustainability risks and the incorporation of a standardised set of quantitative scenarios in the ORSA seems overly prescriptive and disproportionate. The very nature of the ORSA is to be tailored to the specific situation of the insurer. It is highly likely that standardised scenarios will struggle to match the diversity of insurance business models.	Noted.
German Association of Private Health Insurers (PKV)	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.

Allianz SE	 The time horizon of ORSA (own risk and solvency assessment) is defined as period for which a business plan is established, i.e. typically 3 to 5 years. As such the ORSA includes a projection of the financial and solvency situation over this time period, complemented by a discussion of risks attaching to particularly important exposures of the respective entity for which the ORSA is prepared. As such the time horizon of climate change scenarios is longer than the current ORSA time horizon. A requirement to include long-term scenario analysis in ORSA therefore constitutes a new element, which extends the scope of ORSA to cover extremely long time periods, for which any quantitative analysis is only possible when incorporating expert judgement. The value added of such scenarios might therefore be questionable For any ORSA requirements to result in meaningful outcomes, a standardized climate scenarios may not be sufficient, but needs further conceptual work to achieve its desired goal. 	Noted. While the time horizon of the ORSA may typically extend to 3-5 years, undertakings should be mindful of risks which may extend beyond this horizon
Group	ILAG would welcome a standard set of scenarios that could be considered in the ORSA. We believe that, for smaller offices, it would not be practical or cost effective to maintain independent expertise in climate science. Nevertheless, ILAG believes that such scenarios should be provided as guidance and should not be mandatory. Insurers should comment on the allowance for climate change and should explain their approach. For many of its members, however, the limited exposure to such scenarios could result in computing a range of results showing limited impact on the member balance sheet, not justifying the cost. ILAG believes that scenarios should be simple to apply and that using complex time-dependent functions to model these risks is likely to lead to some obfuscation in the results. Simplified adjustments to long-term trends captured through the liabilities (through mortality trends or expense inflation) would be more appropriate. For the assets, ILAG believes that the use of market consistent models will have already allowed for market views of sustainability, and that the current range of assets stresses could be adapted to incorporate the features of asset-side shocks.	Noted. EIOPA has endeavoured to leverage work performed by other bodies (IPCC and IEA) to promote a more harmonised consideration of climate related risks.
Vienna Insurance Group AG Wiener Versicherung Gruppe		Noted.
Actuarial Association of Europe	However, it would be vitally important to recognise that any standardised climate change scenarios would come with a wide range of uncertainty. A precautionary approach would suggest focusing on the range, not simply a probability-weighted best estimate. Irrespective of this, the following imponderables must be considered: •Significant differences only arise after decades which is a horizon that enables successful management actions (unless the insurer is in hibernation) mitigating the losses to	Noted. EIOPA acknowledges the variety of challenges presented by climate related risks, however stresses the need for work to be undertaken to ensure the insurance sector is well positioned to tackle these risks.
1 0	We do not agree to include sustainability scenarios in the ORSA, to the extent that this risk does not represent a relevant part of the risk profile, of the financial institution. In any case, it could be addressed in a descriptive approach, through assessment and management of this risk by the insti-tution.	Noted.

		,
EIOPA insurance and re- insurance stakeholder group		Noted. EIOPA acknowledges the variety of challenges presented by climate related risks, however stresses the need for work to be undertaken to ensure the insurnce sector is well positioned into the future.
Finance Watch	regulators for each parameter that internal models cannot fall below.	Noted.
Insurance Europe	 quantitative scenarios. Stress tests at European level would be a more appropriate tool in this respect. While EIOPA should follow up on the RCP, the industry highlights that some of the issues associated with quantitative scenarios may be better addressed through qualitative scenario analysis. Climate-related scenarios should ideally cover a wide range of plausible climate change conditions, but also consider fixing other boundary conditions (as variables or assumed constants) relevant to population development, urbanization and concentration, land use, migration to the coasts, early adaptation measures, changes to the build environment, ie factors currently changing the physical risk landscape at a fast pace. This broad and dynamic approach may be better addressed through qualitative analysis. The industry encourages EIOPA to remain cognisant of various initiatives in individual member states, eg the PRA/FCA Climate Financial Risk Forum. 	Noted. EIOPA recognises the need for ORSAs to remain under the control of undertakings, however EIOPA believes that it is possible to maintain this principle, while also assisting undertakings in how they may assess climate related risks
Assuralia	Instance, the stress test scenarios of EIOPA in their ORSA. In the stress test of EIOPA, it seems only relevant to consider the possible short-term impacts of sustainability risks. This is necessary as the stress test aims to test the impact of an adverse scenario within a one-year time horizon. By contrast, in the ORSA for this purpose different complimentary approaches could be used. From a short- term perspective quantitative methods could be used and from a long-term perspective qualitative methods are more appropriate.	Noted.
Caisse des Depôts Group	No views	Noted.

AMICE	Standardised set of scenarios See also our previous answer. A standardised set of quantitative climate change scenarios should not be included in the ORSA. The ORSA is entity specific and should remain focused on the local scenarios specific for the (emerging) risks of the insurer itself. For this reason, a standardised climate change scenario should not be included in the ORSA report as climate change risks are of different nature across insurers and jurisdictions. If EIOPA is of the opinion that a standardised set of scenarios should be developed, this could be part of a (macroprudential) stress test scenario. The nature of such scenarios should be qualitative since quantitative scenarios subject to many different assumptions would deliver uncertain outcomes. In our view, some flexibility should be given as a too standardised set of scenarios would not provide any meaningful information. Naturally, EIOPA could come up with a standardised set of scenarios including assumptions on consumer behaviour and trends on technological innovation to assist smaller re/insurers. Time horizon The time horizon used by insurers would depend on which part of the climate risk they are facing, and on how quickly the region in which they are operating, would be affected by that particular climate change. For certain changes, a shorter long-term horizon could be used: for example, more severe and concentrated downpours could have a shorter time horizon than the impact of rising sea levels. Again, this should be based on the situation of each and every re/insurer. To facilitate the process, EIOPA could in any case provide some standardised data as to when certain impacts/effects could be felt by society. Such data which may be submitted by national authorities could guide the necessary length of the time horizon.	Noted. EIOPA recognises the need for ORSAs to remain under the control of undertakings, however EIOPA believes that it is possible to maintain this principle, while also assisting undertakings in how they may assess climate related risks.
GLOBAL WARNING	I agree with the ESRB 2016 report on climate change risks that the transition could be fast, and disorderly. For the transition risk, given the well below 2°C carbon budget, the time horizon could be just a couple of years from now, let's say 2025. In that respect, EIOPA reference to "market consistent valuation for assets" does not fit with the climate risk challenge. Climate change is, indeed, the largest market failure ever.	Noted. EIOPA recognises the need for ORSAs to remain under the control of undertakings, however EIOPA believes that it is possible to maintain this principle, while also assisting undertakings in how they may assess climate related risks.

Question 5: Do you agree that the principles of valuation of assets of Solvency II allow for the consideration of sustainability factors?

Name of the organisation	Question 3	Please elaborate.	Response from EIOPA
SD-M GmbH	Yes	consideration of material ESG factors is already a fiduciary duty	Noted.
ClientEarth	Yes	We agree with EIOPA's analysis.	Noted.
Financial Guard Ltd	No	S2 relies on market valuations of assets. If and when sustainability risk are not considered in market valuation, then insurance follows this error. S2 must be prescriptive if change is to be made.	Noted. EIOPA points out that in order for market prices to better reflect sustainability risks and factors, further improvements in the availability and quality of information relevant to their valuation are needed.
German Insurance Association	n/a	Already now it is the task within the prudent person principle to address sustainability risks in the assessment of investments, if they are financially relevant. The consideration of sustainability factors could be part of a gen-eral risk/return assessment of assets. However, as already argued in our comments on EIOPAs technical advice on the integration of sustainability risks and factors a consideration of sustainability factors must not result in a contradiction or limitation of the principle of freedom of investment (Art.133 of the Solvency II Directive). Also, it has to be ensured, that a consideration does not contradict the requirement to act in the best interest of existing stakeholders of the company including the policyholders.	Noted. EIOPA points out that in order for market prices to better reflect sustainability risks and factors, further improvements in the availability and quality of information relevant to their valuation are needed.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	n/a	Noted.
FERMA - Federation of European Risk Management Associations	Yes	The current Solvency II framework can easily and efficiently address most of the sustainability risks through existing valuation methodologies. For instance, the credit rating of investments being not sustainable is likely to be lower and will be adequately reflected in the valuation of Solvency II assets. The impact on assets valuation is already factored into the "market value" of those assets at any point in time by the market. Additional stress will pose a significant administrative burden for small and less complex (re)insurance companies.	Noted. EIOPA points out that in order for market prices to better reflect sustainability risks and factors, further improvements in the availability and quality of information relevant to their valuation are needed.
German Association of Private Health Insurers (PKV)	n/a	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	Yes	Already now it is the task within the prudent person principle to address sustainability risks in the assessment of investments, if they are financially relevant. The consideration of sustainability factors could be part of a general risk/return assessment of assets. However, as already argued in our comments on EIOPAs technical advice on the integration of sustainability risks and factors a consideration of sustainability factors must not result in a contradiction or limitation of the principle of freedom of investment (Art.133 of the Solvency II Directive). Also, it has to be ensured, that a consideration does not contradict the requirement to act in the best interest of existing stakeholders of the company including the policyholders. The quantitative valuation of assets in a MVBS approach should in general follow market practices, i.e. sustainability factors can be considered to the extent market prices do consider respective information. Otherwise introducing regulatory valuation requirements for sustainability can lead to unintended consequences e.g. regulatory arbitrage abd volatility if ESG parameters behave erratic.	Noted. EIOPA points out that in order for market prices to better reflect sustainability risks and factors, further improvements in the availability and quality of information relevant to their valuation are needed.

Investment & Life Assurance Group	Yes	Through its market-consistent valuation objectives, Solvency II valuation principles take into account all factors affecting an asset's value, including those relating to sustainability. If sustainability factors do begin to influence asset prices more including, but not solely due to, regulatory changes, then the prices will implicitly include these factors, through their market consistent valuations. To overly a capital charge relating to such factors may risk double counting sustainability factors over ,and above, other important factors.	Noted. EIOPA points out that in order for market prices to better reflect sustainability risks and factors, further improvements in the availability and quality of information relevant to their valuation are needed.
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a	-	Noted.
Actuarial Association of Europe	Yes	investment in such asset classes without cause. Valuation based on quoted market prices reflects all risks perceived by economic agents, including sustainability risks. If the market recognises ESG factors as important for valuation purposes, then the market value will reflect ESG.	Noted. EIOPA points out that in order for market prices to better reflect sustainability risks and factors, further improvements in the availability and quality of information relevant to their valuation are needed.
European Savings and Retail Banking Group	Yes	Yes, we agree. To the extent that Solvency II sets out that valuation of assets should be to market. Consequently, all risks and factors that might influence in the valuation of assets must be ad- dressed.	Noted. EIOPA points out that in order for market prices to better reflect sustainability risks and factors, further improvements in the availability and quality of information relevant to their valuation are needed.

EIOPA insurance and re- insurance stakeholder group	Yes	II. Also Solvency II refers into IFRS standards and uses its definitions on market valuations so one cannot change without another in the current setting. More importantly, there is no better alternative for asset valuation. The issue lies in the genuine uncertainty about sustainability issues, not least climate change. This considered, we appreciate continued improvement in the quality and	Noted. EIOPA points out that in order for market prices to better reflect sustainability risks and factors, further improvements in the availability and quality of information relevant to their valuation are needed.
		 The current Solvency II framework can easily and efficiently address most of the sustainability risks through existing valuation methodologies. The credit ratings might also take into account sustainability measures in the limitations of available data and this will be reflected in the valuation of Solvency II assets. The impact on assets valuation is already factored into the "market value" of those assets at any point in time by the market. Additional stress tests will pose a significant administrative burden for small and less complex (re)insurance companies. 	
Finance Watch	Yes	Yes. However, any additional impetus that can be put on ensuring that sustainability factors are properly taken into account should be considered by EIOPA. It would be worth, for example, making explicit the already implicit requirement that the consideration of sustainability risk is in the best interest of policy holders and beneficiaries by integrating sustainability risk into the person prudent principle. The explicit requirement would be an important addition given that the financial impacts of climate change on investment portfolios might be significant.	Agreed. See EIOPA's advice on sustainability in Solvency II, submitted to the European Commission end April 2019.

Insurance Europe	Yes	The insurance sector fully agrees with the valuation hierarchy of Solvency II (Art. 10 in the Delegated Regulation). The general valuation principles of Solvency II allow for integration of all material risks, including financially material sustainability risks. In a deep liquid and transparent market, market asset prices reflect all known and quantifiable information, including information on sustainability risks. The industry therefore believes that asset valuation in Solvency II does not need to be changed and should remain based on the use of current market values. In point 7.17, EIOPA argues that "the availability and quality of information on sustainability risk and sustainable investments, may not be at a level of granularity and consistency today that allows for full reliance on the market valuation". While the industry recognises that not all market valuations perfectly capture information associated with sustainability factors, any artificial adjustments of asset prices would risk leading to unintended consequences. Instead, Insurance Europe believes that this type of uncertainty is better handled with other tools, eg risk management. Given the degree of uncertainty, and the fast-developing nature of this policy area, the insurance sector encourages EIOPA to work with the industry to develop its approach to this issue.	Noted. EIOPA points out that in order for market prices to better reflect sustainability risks and factors, further improvements in the availability and quality of information relevant to their valuation are needed.
Assuralia	Yes	The insurance sector fully agrees with the valuation hierarchy of Solvency II (Art. 10 in the Delegated Regulation). The general valuation principles of Solvency II allow for integration of all material risks, including financially material sustainability risks. Market asset prices reflect all known and quantifiable information, including information on sustainability risks. Not all companies publicly disclose on the sustainability risks relating to their activities. The industry appreciates continued improvement in the quality and scope of public disclosure on sustainability risks to support market valuation.	Noted. EIOPA points out that in order for market prices to better reflect sustainability risks and factors, further improvements in the availability and quality of information relevant to their valuation are needed.
Caisse des Depôts Group	n/a	No views	Noted.
AMICE	Yes	Yes, the current framework does allow the inclusion of sustainability risk to a sufficient manner. However, there is not much market practice in including sustainability risk where a quoted price is not available in an active market. In principle, if a quoted price is available in an active market, one should assume any emerging views on sustainability are included in the pricing of the financial instrument. If the risks, as voiced by EIOPA, are emerging and become more tangible, this would be seen in the development of the pricing. Also, if an asset were to be seen as stranded, then this would be seen in the quoted price. The supervisory authorities should refrain from stating that a certain quoted asset is "brown" or "stranded" because this would induce a "self-fulfilling prophecy" and would act in a procyclical manner regarding the issue of stranded assets. If no quoted price is available and only limited data exists, it would be appropriate to include sustainability considerations. However, again how? If an insurer suspects that a class of asset is becoming stranded or runs the risk of becoming stranded, the insurer's investment policy and/or prudent person principle should take appropriate action.	Noted. EIOPA points out that in order for market prices to better reflect sustainability risks and factors, further improvements in the availability and quality of information relevant to their valuation are needed.

GLOBAL WARNING	No	"Sustainability" is not a well defined concept. □ More importantly, the EIOPA reference to "the introduction of a carbon price" could confort some old mainstream macroeconomists (among them the ones who proposed the carbon price paradigm in the first IPCC Assessment Report in 1991), but this idea seems totally outdated in 2019. The progressive carbon price idea was the magic perlimpinpinpin powder enabling an "orderly transition", a trick no one trust any longer.□	Noted.
----------------	----	---	--------

d.

Question 6: How in practice could the valuation of assets adequately (better) reflect sustainability risks?

Name of the organisation	Please elaborate.	Response from EIOPA
SD-M GmbH	Focus on material ESG factors, SD-KPIs from SD-KPI Standard 2016-2021 (3 SD-KPIs for 68 industries, supported by German Environment Ministry and Sustainability Accounting Standards Board).	Noted.
ClientEarth	EIOPA notes that improved public disclosure of sustainability risks is of crucial importance to ensure that market prices can factor in sustainability. We agree with this observation and would urge EIOPA to consider how this may be promoted through the framework of Solvency II. In particular, insurers are required under Solvency II to i) have an effective risk management system, and ii) only invest in those assets whose risks can be properly identified and managed. We therefore consider that insurers ought to be proactively using their rights as asset owners to push companies to disclose the information they (or their advisers) need to make informed investment decisions. Given the importance of this information, we believe such actions form part of an "effective risk management system" as required under Solvency II. As such, EIOPA may consider including this as an example of good practice similar to those elaborated for the valuation of liabilities.	Noted. See EIOPA's advice on sustainability in Solvency II, delivered to the European Commission end April 2019.
Financial Guard Ltd	risks means to deviate from market practices for reasons other than market methodologies. It must be acknowledged that this is currently outside of the Solvency II regime. With that said, there are two possible directions for "better" valuations of assets: either lower valuations reflecting the extra risk due to sustainability, or higher valuations to give credit for "green" activities as specified by some authority. The risk, reducing asset valuations (or increasing capital requirements) due to a new risk category (sustainability or climate) fits within Solvency II's current framework. We do not support this. This would appear to increase capital charges while not allowing companies to manage climate risk. We do support increased asset valuations for "green" activities, but this is not something regulators have the remit to do. To be clear, increasing green asset valuations for capital calculations is not done because these assets are viewed as less risky. Indeed, the increased valuations for capital calculations is over and above any market valuation for these assets. For this reason, this is not a benefit that could be done by regulators (EIOPA) alone because it is contrary to their risk-regime framework.	Noted.
	Green Capital benefits with governmental guarantees: Encouraging "green" works could be done, if other than the regulators mandate it. For example, if if governments supply a guarantee for "green" investments. We advocate the following apprach: We advocate a partial guarantee from government, in which green assets are valued higher, but only for capital valuation purposes. This could be implemented and monitored by the regulators. By allowing green assets to "count extra" for capital calculations, this has the effect of reducing required capital for these financial companies. This would motivate the companies to invest in the green activities, freeing up large amounts of capital for green programs. The amount of capital benefits a company receives for green investments will be determined externally to the company, by criteria set by government programs. Such criteria may include impact on the world, the effect on moving towards a low carbon real economy, and to provide "just transition" solutions.	

German Insurance Association		Noted. EIOPA supports efforts for increasing transparency on ESG ratings.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	Noted.
FERMA - Federation of European Risk Management Associations	FERMA believes that it is crucial to bear in mind that captive (re)insurance undertakings are not institutional investors and as such do not bear the same level of stranded assets risk because of transition risks. There would consequently be no value from both a regulatory or operational perspective to consider new valuation techniques based on sustainability applicable to captives.	Noted.
German Association of Private Health Insurers (PKV)	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.

Allianz SE	We agree with EIOPA that continued improvement in the quality and scope of public disclosure on sustainability risks and factors affecting assets is of crucial importance to ensure that market prices can factor in sustainability. There are a series of gaps and barriers that complicate the identification and assessment of climate change risks on a company-wide scale. As for climate, corporate disclosure is still in its infancy. This impairs data availability and quality. Concerning the data which is available there are significant differences between different data providers and ESG rating agencies (e.g. on carbon footprint). There is a lack of clear definitions and rules for the classification of sustainable activities as well as valid scenarios and knowledge on expectations for future technological development and demand. A certain standardization and oversight on data providers and ESG agencies could be helpful to improve data quality. Furthermore the identification and valuation models are recent; related methods are not yet stabilized: the choice of data necessary for valuation depends on the chosen method, which could consequently evolve with the progresses made in methodologies. Moreover, the collection of data needs to be outsourced to data providers and ESG-rating agencies which entails considerable costs and creates further dependencies. (Background: Under Solvency II, insurers have had the following experience with rating agencies for several years: The fact that they are dependent on external ratings for determining their capital adequacy creates a dependency in the oligopolistic market of rating agencies which enables rating agencies to impose considerable (often more than 5%) annual cost increases on insurers). Oligopolistic structures are also already emerging in the ESG market.	Noted. EIOPA supports efforts for increasing transparency on ESG ratings.
Investment & Life Assurance Group	ILAG considers that the proposed use of Pillar 2 capital for reflecting sustainability factors in insurers' assets is more appropriate than amending the market-consistent / fair value of an asset for such factors. If there are to be sustainability or wider ESG factors applied to asset valuations, rather than just to capital requirements, the use of external ESG ratings needs to be consistent to ensure Solvency II results are comparable across the EEA. While undertakings may produce their own internal ESG ratings, these should be based on an approved framework across the EEA, to ensure consistency and comparability.	Noted. EIOPA supports efforts for increasing transparency on ESG ratings.
Vienna Insurance Group AG Wiener Versicherung Gruppe	-	Noted.
Actuarial Association of Europe	Sustainability should not alter the market valuation. It could however, pose a risk or opportunity which should be dealt with in Pillar 2. In practice, reflecting sustainability risks in the valuation of assets would pose some challenges: •Marked-to-Market Valuation Where a marked-to-market valuation, in compliance with Solvency II principles is available, it is difficult to justify any deviation, as the market price should by definition reflect the price that can be reached in an arms-length transaction, meaning the price is correct by definition. Valuation by insurance industry for the Solvency II purpose cannot be different. In theory, a market price includes all available information and already reflects all risks, including sustainability risks. •Mark-to-Model Valuation For illiquid assets (e.g. real estate, private equity/debt), mark-to-model approaches, based on discounted cash flows models, are normally used. Such valuations should reflect the uncertainty of the amount and timing of the cash flows, requiring higher expected yields (i.e. lower valuations) with increasing uncertainty. Sustainability risks contribute to this uncertainty, and should be reflected adequately.	Noted.
European Savings and Retail Banking Group	These developments are still under development by the industry and currently there is a lack of consensus.	Noted.

		[]
EIOPA insurance and re- insurance stakeholder group	we agree that improved public disclosures can better incorporate sustainability factors in market prices. EIOPA notes that improved public disclosure of sustainability risks is of crucial importance to ensure that market prices can factor in sustainability. We agree with this observation and would urge EIOPA to consider how this may be promoted via the insurance regulation. Anyway it is important to recognize that insurers are entirely dependent on the existing market standard for disclosure in those sectors they invest in. Therefore insurers as investors can't request from investees a more detailed disclosure than investees are obliged to provide by law or what is current practice in ESG ratings. There are a series of gaps and barriers that complicate the identification and assessment of climate change risks on a company-wide scale: •As for climate, corporate disclosure is still in its infancy. This impairs data availability and quality. Concerning the data which is available, there are significant differences between different data providers and ESG rating agencies. For instance, carbon footprint might be the most standardised of the ESG metrics after all, and the differences in ESG ratings are probably much larger when it comes to other areas than carbon footprint. •There is a lack of clear definitions and rules for the classification of sustainable activities as well as valid scenarios and knowledge on expectations for future technological development and demand. Standardization and oversight in some general level on data providers and ESG agencies could be helpful to improve data quality. •The identification and valuation models are recent; related methods are not yet stabilized: the choice of data necessary for valuation depends on the chosen method, which could consequently evolve with the progresses made in methodologies. •The collection of data will usually be outsourced to data providers and ESG-rating agencies which entails considerable costs and creates further dependencies. As a background, un	Noted. EIOPA supports efforts for increasing transparency on ESG ratings.
Finance Watch	 ESG investing is often either considered to increase exposure to risk due to nature of the investments, or seen as a form of risk management and so leads to lower returns. Insurers are, however, uniquely placed to potentially consider taking a shared value business model perspective. See FSG, 'How Insurers Gain Competitive Advantage by Better Addressing Society's Needs', June 2017. As well as targeting investment opportunities to reduce protection gaps or target prevention, insurers can also avoid investments that are counter-productive. Insurers could put this into practice taking a stewardship role and pushing for better data availability on assets to help improve the reflection of sustainability risks in their valuation. An additional issue for consideration is that some aspects of the Matching Adjustment mechanism, which is meant to encourage investment in long-term assets, work against sustainable investment, for example: The benefit of the MA is applied by reducing current technical reserves and solvency capital requirements instead of spreading this benefit over the lifetime of the asset. The use of what are, in effect, short-term capital incentives to promote long-term sustainable investment creates a confusing policy signal on sustainability. The MA is available for assets with fixed cashflows. Excluding investments with variable cashflows could harm investment in some categories of new sustainable infrastructure. The MA takes account of expected losses on assets via the "fundamental spread" but does not protect insurers against unexpected losses. This oversight needs addressing, given rising uncertainty linked to climate change. Ideally, the rules would encourage long-term investing without resorting to short-term capital incentives, and would provide some protection against unexpected losses as climate uncertainties increase. 	Noted.

Insurance Europe	 Please see answer to question 5. The insurance industry reiterates that the principles of sustainability should be highlighted in the market value trend and it agrees that improved public disclosures can help better incorporate sustainability factors in market prices. The industry stresses that identification and assessment of climate change risks on a companywide scale is complicated: There is a lack of clear definitions and rules for the classification of sustainable activities. Climate-related corporate disclosure is at its early stages of development, which in turn negatively affects data availability and quality. Models and methodologies that consider sustainability in asset valuation are new. Also, there is no consensus on the validity of used scenarios, including climate change trends and future technological developments. Even when data are available, there are significant data inconsistencies between data providers and environmental, social and governance (ESG) rating agencies, eg on carbon footprint. Moreover, such data is expensive, especially for small- and medium-sized insurers who are fully dependent on external data providers and ESG-rating agencies. This situation can be even worse when there are oligopolistic structures in the ESG market and coverage issues. 	Noted. Eiopa supports recents initiatives such as EU taxonomy and further transparency on sustainability related disclosures.
Assuralia	Please see answer to question 5. The insurance industry reiterates that the principles of sustainability should be highlighted in the market value trend and it agrees that improved public disclosures can better incorporate sustainability factors in market prices. The industry stresses that identification and assessment of climate change risks on a company- wide scale is complicated: There is a lack of clear definitions and rules for the classification of sustainable activities Climate-related corporate disclosure is at its early stages of development, which in turn negatively affects data availability and quality. Models and methodologies that consider sustainability in asset valuation are new and there is no consensus on the validity of used scenarios, including climate change trends and future technological developments. Even when data are available, there are significant data inconsistencies between data providers and ESG rating agencies, e.g. on carbon footprint, recycling, product cycle impact and social issues such as unhealthy working conditions and a breach of human rights. Moreover, such data is expensive, especially for small and medium insurers who are fully dependent on external data providers and ESG rating agencies. This situation can be even worse when there are oligopolistic structures in the ESG market and there are coverage issues. For these reasons, the industry believes that a minimum standardization and oversight on data providers and ESG agencies could be beneficial in terms of data quality. Data on ESG should be easily available to investors and the costs should be limited.	Noted. Eiopa contributes to the work on the EU taxonomy and further supports efforts for increasing transparency on ESG ratings.
Caisse des Depôts Group	No views	Noted.
AMICE	See answer to question 5	Noted.

GLOBAL WARNING	One can be quite skeptical regarding the theoretical foundations of the "stranded asset" theory. And the EIOPA belief that "In a deep, liquid and transparent market, prices should reflect all known (and quantifiable) factors, including sustainability consideration" is a fairy tale for children ; or for mainstream macroeconosmists ? See my OBSERVATORY 173 CLIMATE – LIFE INSURANCE (November 2018) on stranded assets : https://theshiftproject.org/observatoire-173/ TO COAL ! - INVESTMENT POLICIES ANALYSIS of FRENCH LIFE INSURANCE COMPANIES https://theshiftproject.org/wp-content/uploads/2018/11/2018-12-11_To-coalObservatoire-173- Climat-Life-insurrance_The-Shift-Project_V0-1.pdf In french : https://theshiftproject.org/wp-content/uploads/2018/10/2018-11-27_Sus-au-charbonObservatoire- 173-Climat-Assurance-Vie_The-Shift-Project_V2.pdf One can also have a look at : ILB and Collège de France conference – 19/06/2019 Analysis of the investment policies of French life insurance & essence of "stranded assets".(in french) https://www.louisbachelier.org/retour-sur-levenement-rechauffement-societe-et-responsabilite/ Audio : https://soundcloud.com/user-114861386/analyse-des-politiques-dinvestissement-de-lassurance- Vie-francaise Slides: https://www.louisbachelier.org/wp-content/uploads/2019/07/michel-lepetit.pdf	Noted.
----------------	--	--------

Question 7: Should prudential disclosure requirements (e.g. Articles 263 and 296 of the Delegated Regulation) be amended to explicitly include sustainability considerations?

Name of the organisation	Question	Please elaborate.	Response from EIOPA
SD-M GmbH	Yes	Disclosure of integration of material ESG indicators should be explicitly mandatory.	Noted.
ClientEarth	Yes	We consider that making explicit references to sustainability considerations is beneficial. This approach is in line with the amendments and rationale followed by EIOPA in their technical advice on integrating sustainability risks. 263: No.	Noted.
Financial Guard Ltd	Yes	In 296(2), consistent with other recommendation made in this response to have "Green Capital Benefits", a subparagraph should be included requiring the (re)insurer to make a statement of the use of "Green Capital Benefits."	Noted.
German Insurance Association	No	In our point of view the public disclosure should be streamlined and focussed on material information for policyholders and the professional public. Therefore, we do not think that the SFCR is the best place to publish sustainability considerations. The SFCR is a report which contains information about the solvency and financial situation. This is why we are criti-cal of amending the SFCR by including sustainability information. We propose aligning the SFCR reporting to the above target groups in future to increase its impact: •A brief narrative report should enable the average policyholder to acquire an overview of an insurer's key information. It would include an overview of a company's solvency and financial situation or transactions planned for the future, which could change the company's business position. •The more detailed quantitative report for the professional public would contain more detailed information and key figures, for example to support a professional's decision-making process or to be relayed to policyholders in an appropriate format by consumer protection groups. Extending the scope of the SFCR to sustainability aspects should be carefully considered. Given, that the SFCR reports contain extensive information and at the same are only rarely read by external stakeholders we believe that reporting on sustainability considerations should not be extended to SFCR reports. Due to the upcoming regulation on disclosures relating to sustainable investments and sustainability risks (COM(2018) 354 final), sustainability considerations have to be disclosed at different points, e. g. websites, pre-contractual disclosures. Therefore we believe an additional disclosure in the SFCR-Report is redundant.	Noted. The suggestions are beyond the scope of the opinion.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	n/a	Noted.
FERMA - Federation of European Risk Management Associations	n/a	n/a	Noted.
German Association of Private Health Insurers (PKV)	n/a	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	n/a	In our view the public disclosure should be streamlined and focused on material information for policyholders and the professional public. Therefore we do not think that the SFCR is the right format to publish detailed sustainability considerations. The SFCR is a report which contains relevant information about the actual solvency and financial situation. Extending the scope of the SFCR to sustainability aspects should be carefully considered. Given that the SFCR reports contain extensive information and at the same time are not widely read by external stakeholders we believe that reporting on sustainability considerations should not be extended to SFCR reports. ESG topics are covered in the sustainability report which is the right place to report on respective topics.	Noted.

Investment & Life Assurance Group	No	The existing requirements cover sustainability considerations, if they are relevant to the valuation approach. Additional disclosures, for example in the SFCR, should only be required if they are materially relevant for a firm.	Noted.
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a	-	Noted.
Actuarial Association of Europe	No	Articles 263 and 296 of the Delegated Regulation are so conceptual / general in their formulation that explicit reference to sustainability factors would not be appropriate. There are many considerations that could be included explicitly in these articles: e.g. geopolitical stability, financial stability, new customers, policy holders, shareholders, the economy, employees, service providers, food safety etc. Explicitly calling-out any one, could risk ignoring the others. Such detail would fit better a more specific setting, for example EIOPA guidelines. According to these articles, emphasis should be on the full spectrum of risks, including, of course, sustainability risk. This implicitly includes any related disclosure requirements. Therefore, it should already be standard practice to disclose material effects including any sustainability considerations. Conversely, if sustainability risks are not relevant for an entity, no additional disclosure requirements should be required.	Noted.
European Savings and Retail Banking Group	No	ESG risks must be analysed as a whole. As example, an eventual penalization of brown companies with higher capital requirements or green companies which receive bonus. Consequently, the situa-tion may arise that certain companies will be excluded, for example, companies that require further investments in order to do the energy and social transition.	Noted.
EIOPA insurance and re- insurance stakeholder group	Yes	We don't find a unanimous answer to this question. On the one hand, the current requirement in Art. 263 and 296 are sufficient and do not represent a barrier to consider sustainability considerations. In fact, they require insurers to consider the valuation uncertainty and to state the assumptions underlying the valuation approach, which might also include sustainability considerations. Therefore, no changes are required to the articles - sustainability considerations, including on sustainability risks, should be treated at the same level as other relevant considerations for the valuation of assets. On the other hand, expressly making reference to sustainability considerations and explicitly including sustainability considerations might be beneficial and ensure that all insurers take this into account in sufficient manner and start actions. We note the questions about including sustainability disclosures in the SFCR and would like to raise our concerns about the current effectiveness of SFCRs, which contain extensive information and are rarely read by external stakeholders. We believe that external sustainability information should be disclosed elsewhere as the SFCR is not the right format to publish sustainability considerations. The SFCR is a report which contains information about the solvency and financial situation. This is why we are critical of amending the SFCR by including general sustainability information. We propose aligning the SFCR reporting to the above target groups in future to increase its impact: A brief narrative report should enable the average policyholder to acquire an overview of an insurer's key information. It would include an overview of a company's solvency and financial situation or transactions planned for the future, which could change the company's solvency and financial situation or transactions planned for the future, which could change the company's solvency and financial situation or transactions planned for the future, which could change the company's solvency and	Noted. The suggestions are beyond the scope of the opinion.

this respect, the industry raises its concerns about the current effectiveness of SFCRs, which contain extensive information and are rarely read by external stakeholders. In order to increase its impact, the SFCR should be focused on the key target groups. the opinion. The industry believes that external sustainability information should be disclosed in a more appropriate user-friendly document, while the SFCR should contain references to sustainability only with respect to relevant sustainability risks affecting the solvency and financial situation of the undertaking. Finally, the industry notes that multiple changes in disclosures times over time might not be efficient for the disclosures users and for insurers. Such changes are burdensome for insurers and do not enhance understandability and comparability of information for disclosure users. The current requirement in Art. 263 and 296 are sufficient and do not represent a barrier to consider sustainability considerations. In fact, they require insurers to consider the valuation uncertainty and to state the assumptions underlying the valuation approach, which might also include sustainability considerations. Therefore, no changes are required to the articles. Noted. Reference is made to the onn-	Finance Watch	Yes	Given that the use of AVM might be particularly relevant to assets or liabilities that can be impacted by sustainability considerations, it would be important to explicitly include them under Article 263 of the Delegated Regulation. The provisions of Article 296 of the Delegated Regulation could benefit from additional emphasis on assessing and describing levels of uncertainty that may be impacted by sustainability considerations.	Noted.
AssuraliaNoConsiderations. In fact, they require insurers to consider the valuation uncertainty and to state the assumptions underlying the valuation approach, which might also include sustainability considerations. Therefore, no changes are required to the articles.Noted. Reference is made to the non- 	Insurance Europe	No	 uncertainty and to state the assumptions underlying the valuation approach, which might also include sustainability considerations. Therefore, no changes are required to the Articles. The industry also stresses that a distinction needs to be made between: The need to publicly report sustainability considerations – in this respect, regulations are already introducing sustainability-related disclosures (eg Non-Financial Reporting Directive and Disclosure regulation). The current Solvency and Financial Condition Report (SFCR) framework and sustainability disclosures in it – in this respect, the industry raises its concerns about the current effectiveness of SFCRs, which contain extensive information and are rarely read by external stakeholders. In order to increase its impact, the SFCR should be focused on the key target groups. The industry believes that external sustainability information should be disclosed in a more appropriate userfriendly document, while the SFCR should contain references to sustainability only with respect to relevant sustainability risks affecting the solvency and financial situation of the undertaking. Finally, the industry notes that multiple changes in disclosures times over time might not be efficient for the disclosures users and for insurers. Such changes are burdensome for insurers and do not enhance 	are beyond the scope of
	Assuralia	No	 considerations. In fact, they require insurers to consider the valuation uncertainty and to state the assumptions underlying the valuation approach, which might also include sustainability considerations. Therefore, no changes are required to the articles. The industry also stresses that a distinction needs to be made between: The need to publicly report sustainability considerations – in this respect, regulations are already introducing sustainability-related disclosures (e.g. Non-Financial Reporting Directive and Disclosure regulation). The current SFCR framework and sustainability disclosures in it – in this respect, the industry raises its concerns about the current effectiveness of SFCRs, which contain extensive information and are rarely read by external stakeholders. In order to increase its impact, the SFCR should be focused on the key target groups. The industry believes that external sustainability information should be disclosed in a more appropriate user-friendly document, while the SFCR should contain references to sustainability only with respect to relevant 	made to the non- financial reporting

AMICE	No	We suggest that EIOPA takes into account the work being conducted by the TEG on non-financial reporting. Sustainability should be a key element of the investment strategy and reputational profile of an insurance company and should be properly reflected in the non-financial reporting. Furthermore, sustainability risks should already be included in solvency requirements, that cover all the risks faced by insurers. For these reasons, ad- hoc sustainability considerations should not be included in the prudential disclosure requirements. It would be justified to request insurers to disclose the manner in which they cope with sustainability risks in their various policies if deemed to be present. This information should at first be qualitative.	Noted. Reference is made to the non- financial reporting guidelines.
GLOBAL WARNING	n/a	N/A	Noted.

Question 8: Should other enhancements / changes to the current regulations be envisaged regarding the consideration of sustainability factors in the valuation of assets?

Name of the organisation	Question 8	Please elaborate.	Response from EIOPA
SD-M GmbH	Yes	The impact of integrated material ESG indicators on financial returns should be disclosed, too.	Noted.
ClientEarth	n/a	-	Noted.
Financial Guard Ltd	No	NA	Noted.
German Insurance Association	n/a	Given the extensive reporting requirements that already exist (CSR-reporting), additional provisions should be carefully considered. A precondition to improve data quality should be to build up a pan-European data base or at least to initiate a research project assigned to an independent institution such as a European Supervisory Authority to validate correlation and risk parameters of investments exposed to sustainability risks.	Noted.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	n/a	Noted.
FERMA - Federation of European Risk Management Associations	n/a	n/a	Noted.
German Association of Private Health Insurers (PKV)	n/a	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	Yes	Given the extensive reporting requirements that already exist (CSR-reporting), additional provisions should be carefully considered. A precondition to improve data quality should be to build up a pan-European data base or at least to initiate a research project assigned to an independent institution such as a European Supervisory Authority to validate correlation and risk parameters of investments exposed to sustainability risks	Noted.
Investment & Life Assurance Group	Yes	Consistent ESG ratings, or clear guidance on how undertaking should create their own ratings, are considered key to ensuring comparability across insurers.	Noted.
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a	-	Noted.
Actuarial Association of Europe	No	Consideration of sustainability factors in the valuation of assets is not only an issue in Solvency II. It should be left to experts; e.g. IASB	Noted.
European Savings and Retail Banking Group	n/a	-	Noted.
EIOPA insurance and re- insurance stakeholder group	No	We find that no other enhancements / changes to the SII regulation are needed. Requirements on improved disclosures need to be addressed to a broader group of companies to facilitate the consideration of sustainability risks in the valuation of assets. Rather than suggesting new requirements on asset evaluation, we encourage EIOPA to focus on improving data quality and to collect reliable information and sustainability parameters for the investments. Also, we see that policymakers should instead facilitate and legislate the costs of the so-called externalities, as without, the capital market cannot function in favour of sustainability.	Noted. EIOPA supports tranparency on ESG ratings.

			1
Finance Watch	Yes	In the context of comments made over the need to broaden the approach to sustainability to look at nature depletion and eco-systems as well as climate change impacts mentioned in the opinion, EIOPA could explore integrated valuation methodologies. Nature has an intrinsic value that cannot, and should not, be evaluated only through the lens of the benefit that mankind derives from it. As multiple and sometimes conflicting types of value co-exist (e.g. ecological, cultural, monetary) and their respective valuation methodologies (e.g. monetary, biophysical, sociocultural), an 'integrated valuation' framework could help integrate this range values that emerge at different levels (individual, community, national), by relying both on qualitative and quantitative information. Such a framework could be promoted as a way to answer the need to value nature, concerns over potential side-effects of monetary valuation and the limitations of relying solely on one method of valuation. See Finance Watch report 'Making Finance Serve Nature, May 2019'.	Noted.
Insurance Europe	No	No other enhancements / changes to the Solvency II regulation are needed. Requirements on improved disclosures need to be addressed to a broader group of companies to facilitate the consideration of sustainability risks in the valuation of assets. This will also ensure that ESG data is available at affordable prices. Sustainability/ESG ratings will unavoidably affect the market value of assets insurers will invest in. Therefore, a regulatory framework should ensure that sustainability ratings, which are provided by independent assessors, are comparable and reliable for investors. As the coverage of ESG rating agencies expands, the large majority of insurance companies will need expertise and resources to assess the sustainability ratings. At the same time, obtaining specific sustainability-related information could end up being unreasonably demanding, especially for small insurers fully relying on third party providers. In this respect, proportionality needs to be duly considered.	Noted. EIOPA supports tranparency on ESG ratings.
Assuralia	No	No other enhancements / changes to the SII regulation are needed. Requirements on improved disclosures need to be addressed to a broader group of companies to facilitate that sustainability risks are considered in the valuation of assets. Sustainability/ ESG ratings will unavoidably affect the market value of assets insurers will invest in, thus a regulatory framework should ensure that sustainability ratings, which are provided by independent assessors, are correct and reliable. The large majority of insurance companies do not have the resources nor the competences to assess the sustainability ratings.	Noted. EIOPA supports tranparency on ESG ratings.
Caisse des Depôts Group	n/a	No views	Noted.
AMICE	No	No, there is no need as EIOPA already explained in this paper.	Noted.
GLOBAL WARNING	n/a	N/A	Noted.

Name of the organisation	Please elaborate.	Response from EIOPA
SD-M GmbH	No.	Noted.
ClientEarth	-	Noted.
Financial Guard Ltd	No	Noted.
German Insurance Association	In certain cases green assets may also be exposed to physical risks to a great extent (e.g. offshore wind power). Generally any investment in sus-tainable technology at an early stage and prior to its general adoption car-ies a risk of resulting in loss or partial loss of investment.	Noted.
Association of German Public		
Insurers - Verband öffentlicher		Noted.
Versicherer (VöV)	n/a	
FERMA - Federation of		
European Risk Management		Noted.
Associations	n/a	
German Association of Private Health Insurers (PKV)	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	In certain cases green assets may also be exposed to physical risks to a material extent (e.g. offshore wind power).	Noted.
Investment & Life Assurance Group	When issuing guidance or updated requirements, EIOPA and NSAs should take care to ensure these are targeted appropriately. For example, those non-life undertakings with larger natural category exposures may be more affected by physical risks; whereas annuity providers may be more likely to be exposed to transition risks through their assets. Making the guidance or requirements dependent on the material lines of business would ensure a well-targeted approach to sustainability risks, without enforcing potentially onerous and unnecessary requirements on certain undertakings.	Noted.
Vienna Insurance Group AG		Noted.
Wiener Versicherung Gruppe	-	
Actuarial Association of Europe	Dealing with physical risk is the business of insurance. If these risks are, or become, too great for any given insurer, then reinsurance should be sought. The probability of a tail-risk event should be remote, and its impact should be reinsured as far as possible. Reinsurers will be the first to detect trends in evolving risks. In case of significant new evidence, an SCR review should be carried out. Re-calibration of evolving risks in the standard formula and internal models should be aligned with recent and reliable evidence. Outliers should be recognised and eliminated as far as possible. Outliers have to be recognised and eliminated as far as possible. Physical risk should mainly affect natural events. As discussed in question 32, this should be dealt with by a periodic review of catastrophe risk parameters, rather than balance sheet valuation.	Noted.
European Savings and Retail Banking Group	-	Noted.
EIOPA insurance and re- insurance stakeholder group	We have no additional evidence, but we highlight that some physical risks might be covered by an insurance policy. The current available methodologies do not take into account the insurance mitigation to assess the physical risks and therefore are more appropriate to assess a gross physical risk than the impact of a financially material physical risk net of mitigating actions. We also note that so called green-labelled assets may be equally exposed to physical risks as brown-labelled assets. In certain cases, green assets may also be exposed to physical risks to a great extent (e.g. offshore wind power). Generally, any investment in sustainable technology at a too early stage and prior to its general adoption carries a risk of resulting in loss or partial loss of investment.	Noted.

Finance Watch	The view on physical risks referred to in 7.4 and 7.5 of the EIOPA opinion should be broadened out to include risks arising from the impact of climatic, geologic events or widespread changes in ecosystem equilibria, such as soil quality or marine ecology. The Financial Stability Board has outlined that environmental risks can be event-driven ('acute') or longer-term in nature ('chronic'). See Cambridge Centre for Sustainable Finance, Environmental risk analysis by financial institutions: a review of global practice, Cambridge, UK: Cambridge Institute for Sustainability Leadership, 2016.	Noted.
Insurance Europe	No. The insurance sector notes that green-labelled assets may be equally exposed to physical risks as brown-labelled assets (eg offshore wind power).	Noted.
Assuralia	 No. The insurance sector highlights that some physical risks might be covered by an insurance policy. The impact of these physical risks can be limited. However, not all physical risks and their consequences are insured, leaving some asset exposure for the investor. The current available methodologies do not take into account the insurance mitigation to assess the physical risks and therefore are more appropriate to assess a gross physical risk than a financially material physical risk. In addition, the sector notes that green-labelled assets may be equally exposed to physical risks as brown-labelled assets (e.g. offshore wind power). 	Noted.
Caisse des Depôts Group	No views	Noted.
AMICE	In our opinion dealing with physical risks is at the core of all insurance activities. If these risks become too great for the sector to cover, reinsurance or other risk mitigating measures should be considered. The chance of a tail-risk event is significantly reduced through reinsurance or any other risk mitigation measure and its impact insured. Re/insurers would be the first ones to detect trends in evolving risks and the most recent evidence should be considered in re-calibrating these risks both in the Solvency II standard formula and internal models. The SCR review could also be carried out more frequently. However, the natural catastrophe insurance schemes vary across Europe. For example, there are countries where NatCat insurance is mandatory, whereas in other jurisdictions it is not. Further analysis would have to be conducted.	Noted.
GLOBAL WARNING	The issue of NAT CAT risk management and risk cover by state institutions (as the CCR in France; with cover by the French state through off-balance sheet unlimited guarantee) should received the utmost attention from regulators and from the European commission. Work has been done around 2015, and then nothing. A clever mutualization of climate catastrophic risks between European countries would be an example for the rest of the world, as a great leap forward toward adapation to climate change physical risks. Non linearity of phenomenon consequence of climate change and their impacts has to be feared by regulators, european governments and the Commission. Positive feedback loops threat regarding physical phenomenon (e.g. the release of methane by the permafrost ; the albedo of the pole ice covers etc) have to be scrutinized and actively monitors by public scientists worldwide. Besides, couldn't it be time for the insurance industry to give opinions on the use of geoengineering, and its impact on the business models of P&C insurance sectors ?	Noted.

Question 10: Do you have additional views and evid	idence to be considered with reg	gard to the exposure to transition risks?

Name of the organisation	Please elaborate.	Response from EIOPA
SD-M GmbH	No.	Noted
ClientEarth	We note that liability risks have not been considered anywhere within the consultation paper. In the context of climate change, such risks are sometimes described as transition risks. However, this terminology does not make sense for other sustainability issues (e.g. environmental pollution, corruption, human rights). We therefore consider that EIOPA should be including liability risks in its discussion of sustainability. These can potentially be significant (see for example Clyde & Co's recent report: https://resilience.clydeco.com/articles/report-climate-change-liability-risks-for-businesses-directors-and-officers)	Noted. Liability risks are mentioned, but the opinion does not further elaborate on them as this would have exceeded the scope in the given time frame.
Financial Guard Ltd	No	Noted.
German Insurance Association	We agree with EIOPA that the exposure to transition risks depends on the sector of the investment and that sectors most impacted are those involved with / exposed to carbon intensive activities (risk of stranded as-sets). Thus, detailed portfolio analysis is necessary, no general statement about the exposure to transition risks is possible. Apart from that , we would like to point out that insurers are directly invested only to a relatively small part of their portfolio in assets of the real economy. A bigger part of their portfolio is invested in banking exposure and sovereign bonds. With a view to a level playing field and an appropriate and harmonized valuation of assets (e. g. mortgages, covered bonds), it is therefore essential that EIOPA's considerations develop in line with the considerations on valuation / risk management of assets of EBA. Requirements for insurers, the investment industry and banks should therefore be synchronised. Furthermore we would like to point out that green assets can also be exposed to transition risks due to the establishment of sectoral climate-related policies (e. g. development of solar energy equities in the past 10 years). The anticipation of transition risk is not straight forward due to secondary effects within a complex network of cause and effect, for example: When considering transition risks in the battery industry, there is a risk conceiva-ble that concentrated investment in this technology could (i) perpetuate the extraction of precious metals; (ii) result in a monopoly market dominated by a single player in the sector; (iii) decrease of energy supply diversity due to reliance on electrical energy output or (iv) cause issues regarding security of supply due to limited energy supply diversification. All of the above mentioned issues could have an impact on transition risk.	Noted.
Insurers - Verband öffentlicher		Noted.
Versicherer (VöV)	n/a	
FERMA - Federation of European Risk Management Associations	n/a	Noted.
German Association of Private Health Insurers (PKV)	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.

Allianz SE	We would like to point out that green assets can also be exposed to transition risks due to the establishment of sectoral climate-related policies (e.g. development of solar energy equities in the past 10 years). The anticipation of transition risk is not straight forward due to secondary effects within a complex network of cause and effect, for example: When considering transition risks in the battery industry, there is a risk conceivable that concentrated investment in this technology could (i) perpetuate the extraction of precious metals; (ii) result in a monopoly market dominated by a single player in the sector; (iii) decrease energy supply diversity due to reliance on electrical energy output or (iv) cause issues regarding security of supply due to limited energy supply diversification. All of the above could have an impact on transition risk.	Noted.
Investment & Life Assurance Group	Νο	Noted.
Vienna Insurance Group AG		Noted.
Wiener Versicherung Gruppe Actuarial Association of Europe		Noted.
European Savings and Retail Banking Group	No	Noted.
EIOPA insurance and re- insurance stakeholder group	exposure to carbon intensive activities (risk of stranded assets). We appreciate EIOPA's initiative to identify and quantify potential transition risk as the data availability and quality is the biggest barrier to considering transition risks in investment management. Furthermore, we would like to point out that green assets can also be exposed to transition risks due to the establishment of sectoral climate-related policies (e.g. development of solar energy equities in the past 10 years). The anticipation of transition risk is not straight forward due to secondary effects within a complex network of cause and effect. Examples from secondary effects can be found in the following: •how different industries can stop using fossil fuels,□ •if competition changes significantly in some industries creating even monopolies,□ •if the general opinion towards that particular industry changes a lot or if the raw materials used generates new kinds of issues to deal with. We find that the current available methodologies for transition risk (as the alignment to a 2°c scenario) are often not sufficiently reliable to be used as a risk management or investment tool. We note that liability risks, which need to be considered in any scenario of societies and economies transition risks. However, this terminology does not make sense for other sustainability issues (e.g. environmental pollution, corruption, human rights). We therefore consider that EIOPA should be including liability risks in its discussion of sustainability. These can potentially be significant (see for example Clyde & Co's recent report on climate change liability risks for directors and officers).	Noted.
Finance Watch	A point to consider is that the 'market' as a whole seems to assume a very low probability that governments will successfully ban fossil fuels and strongly regulate nature-depletion, and may already have factored this risk in to prices to the extent considered appropriate. Whilst this possible perception of a low probability of effective regulation in the short term exists transition risk may be consistently underestimated. The rapid decline in the values of coal companies is one illustration of this. In other sectors, market views on transition risk may rest on assumptions that will likely change as a result of climate policy and emerging climate risk, for example by significantly shortening the time over which fixed assets of oil and gas companies are depreciated.	Noted.
		[]
-------------------------	---	---
Insurance Europe	No. Insurance Europe agrees with EIOPA that the exposure to transition risks depends to some extent on the sector of the investment and that sectors most impacted are those involved with / exposed to carbon intensive activities (ie risk of stranded assets). However, a holistic approach, inclusive of all ESG risks, might be more appropriate. Climate transition risk analysis should cover the whole investment portfolio and not only a limited number of asset classes that currently appear most exposed. This is because exposures to transition risk can substantially change over time due to a multiplicity of factors. In this respect, insurers are well placed to assess material transition risks, especially in consideration of their role in the prevention of claims/damages. With a view to the level playing field and appropriate and harmonized valuation of assets (eg mortgages, covered bonds), it is essential that EIOPA's considerations are aligned with those of the European Banking Authority (EBA) on asset valuation and risk management. As a consequence, risk-related regulatory requirements for insurers and banks cannot be contradictory.	Noted. The three ESAs liaise regularly on cross- sectoral developments.
Assuralia	We agree with EIOPA that the exposure to transition risks depends on the sector of the investment and that sectors most impacted are those involved with / exposed to carbon intensive activities (risk of stranded assets). With a view to the level playing field and an appropriate and harmonized valuation of assets (e.g. mortgages, covered bonds), it is therefore essential that EIOPA's considerations are aligned with those of the EBA on asset valuation and risk management. As a consequence, risk-related regulatory requirements for insurers and banks cannot be contradictory. Furthermore, the insurance sector notes that green assets can also be exposed to transition risks due to the establishment of sectoral climate-related policies (e.g. development of solar energy equities in the past 10 years). The current available methodologies for transition risk (as the alignment to a 2°c scenario) are not reliable enough to be used as a risk management or investment tool. For now, there are good exploratory tools to better understand the issue. However, there is no consensus on their design and their results cannot be satisfactorily explained from one year to another.	Noted.
Caisse des Depôts Group	No views	Noted.
AMICE	Transition risk is a very intangible risk type. It would be therefore very difficult to substantiate this risk. In our view, transition risk should be assessed in the ORSA and if found to be material, within the prudent person principle and investment policies. It can also be considered that insurers would help with the transition to a low-carbon economy as prevention of claims/damages would improve their capital position even more.	Noted.

GLOBAL WARNING	See my previous comment on other climate transition scenario ("Oil supply constraint" and "generalized import carbon tax"). Please note that the French Senate has voted the following legislative amendment (it was unfortunately not included in the French "Energie et Climat" law at the end of the process) : http://www.senat.fr/enseance/2018-2019/658/Amdt_457.html When the asset management companies prepare the consolidated management report defined in Article L. 225-100-2 of the French Commercial Code, it includes a quantitative analysis of the impact on the value of assets of all national and international standards that may be implemented in order to comply with the Paris Agreement within a time horizon consistent with the expected operating period of the assets held, and a lasting and sustained increase in oil prices as a consequence of a global supply constraint triggered by large-scale disinvestment in oil exploration and production.	Noted.
----------------	---	--------

Question 11: Do you agree with the good practices EIOPA is suggesting for undertakings to apply for integrating sustainability in the valuation of liabilities?

Name of the organisation	Question	Would you have further suggestions? Please elaborate.	Response from EIOPA
SD-M GmbH	Yes	No.	Noted.
ClientEarth	Yes	Yes, we support the good practice elaborated by EIOPA at paragraph 7.41 although we consider that it should also include a reference to the use of best available science.	Noted.
Financial Guard Ltd	Yes	No	Noted.
German Insurance Association	Yes	Yes. We share EIOPA's view that there are no gaps in the regulatory framework with regard to the integration of sustainability in the valuation of liabilities. We agree that future developments have to be taken into account in the calculation of technical provisions. However, we do not think that the good practices EIOPA is suggesting can be laid down in general for all undertakings. It depends on the products and circumstances of an under-taking and the nature and scale of the risks. So the method for capturing future developments such as climate change should be determined individually to reflect this. On the one hand, there are undertakings with long-term business (contracts with duration of several years) and claims with long-term settlement periods. In this case long-term development may be very relevant and should be captured explicitly by possibly complex methods. The methods suggested by EIOPA like using up-to-date data, considering ENIDs, apply-ing stress-tests, scenario-analysis and models with a long forecast time horizon are, if applicable, good practices. Further good practices are unnecessary. While applying any of these practices it needs to be ensured to meet the requirements of solvency. Therefore, the best estimate is to be the expected value without an additional safety margin. On the other hand, there are undertakings with only short-term business (contracts with at most one year duration) and claims with a short settle-ment period (a few months). So only the development in the next year is relevant. The uncertainty regarding climate change for this time span is rather small. Furthermore, the undertaking may have extensive reinsur-ance cover for the duration of the contracts. This reduces the remaining uncertainty and relevance of future development such as climate change a lot. In this case, we think that a proportional method is to capture climate change implicitly by extrapolating the past development (total development without restriction to natural catastrophe risk) to the future as is	Agreed. EIOPA agrees that proportionality is key. In the revised Opinion EIOPA has now better clarified that the good practices would apply where relevant.
Insurers - Verband öffentlicher Versicherer (VöV)	n/a	n/a	Noted.
FERMA - Federation of European Risk Management Associations	n/a	n/a	Noted.
German Association of Private Health Insurers (PKV)	n/a	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	Yes	We agree with the stated good practices It is worth noting that Solvency II best estimate refers to the expected value of the range of possible outcomes. As such existing requirements already ensure this "best practice".	Noted.
Investment & Life Assurance Group	No	The reason for responding negatively is that the nature or scale of the risk in a firm may make this unnecessary. We would prefer the wording to state that these are good practices where the risk to a firm is material. The wording of 7.39 makes this clear.	Agreed. EIOPA has now better clarified that these good practices should be applied in a manner proportionate to the scale and type of exposures faced by an undertaking)

Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a	-	Noted.
Actuarial Association of Europe	Yes	predictive climate modelling which does not exist yet.	Agreed. EIOPA agrees that materiality (and proportionality) are essential.
European Savings and Retail Banking Group	n/a	-	Noted.
EIOPA insurance and re- insurance stakeholder group	Yes	We note that there may be a number of reasons why undertakings do not include climate-change	Noted. In the opinion, a table in the opinion describes examples of using forward-looking cat models. Agreed. EIOPA agrees that approaches should be proportionate.
Finance Watch	Yes	EIOPA could consider ensuring that all of the good practices listed in 7.41 are used at a minimum (terminology under 7.40) when calculating their best estimate. It would be important to understand how EIOPA proposes to ensure that this minimum level of requirements is met.	Noted.

Insurance Europe	No	cannot be generalised to all undertakings, as their applicability depends on the products and circumstances of each undertaking, as well as on the nature and scale of their risks. While the first two "good practices" appear reasonable and are commonly used, more clarity is needed on what EIOPA expects concretely with "develop and use forward looking cat modelling". With respect to stress-testing and scenario analysis, the industry believes that maximum flexibility should be given to insurers. Overall, given the great uncertainties in this area, the insurance industry believes that good practices should be based on high-level principles that allow for flexibility. The sector notes that there may be a number of reasons why undertakings do not include explicit climate-change related risk adjustments in their Best Estimate, as evidenced in paragraph 7.32. In particular, the insurance sector agrees with the statement in 7.36 that the annual validation of assumptions is fit for purpose for short duration business. Premium provisions cover claims incurring in the future, and climate changes could potentially affect these future claims. There are two ends to the spectrum: - For undertakings with only short-term business (at most one-year duration) and claims with a short settlement period (a few months), only the climate change impact in the following year matters. As climate change sill not evolve over the premium provisions' run-off period, the uncertainty regarding climate change is rather small, often accounted for by means of a reinsurance cover for the duration of the contracts. In these cases, a proportional method to implicitly capture climate change effects is the extrapolation of the future, taking into account materiality aspects. This is already good actuarial practice when calculating technical provisions For undertakings with long-term business and claims with long-term settlement periods, long-term development (total development may be relevant. Therefore, it should be explicitly captured, also by mea	Agreed. EIOPA agrees that and proportionality is essential.
------------------	----	---	---

		climate change in Pillar 2 rather than dealing with emerging risks in the valuation.	
AMICE	No	EIOPA suggests in the paper that undertakings should apply good practices such as ensuring that historical loss data is up-to-date, the consideration of possible events not captured by the undertaking's historical loss data set, forward-looking catastrophe modelling and stress-testing or scenario analysis. However, any good practices should be applied in a very proportionate manner and based on the actual risk covered, the terms and conditions which govern the insurance contracts contracts' contract boundary. For most lines of business those practices would not be applicable based on the nature of the risk. Moreover, insurers are requested to disclose their claims triangles, which should be based on up-to-date historical data. The consideration of possible events not captured by the undertaking's historical loss data set is part of the so-called incurred but not reported liabilities. Catastrophe models are not available for all perils that are sensitive to climate risk, e.g. precipitation, and the development of own catastrophe models is not feasible for most undertakings. Most undertakings are dependent on the availability of catastrophe models in the market and in particular on vendor models. To conclude, determining the impact of a scenario is a start but including these outcomes into the valuation also requires that the chance is known and that the climate risk modelling is highly reliable and predictable.	Agreed. In the revised version EIOPA now explicitly mentions the relevance of Pillar 2 ("Therefore, EIOPA also addresses the importance of scenario analysis under Pillar 2, alongside its analysis of Pillar 1 elements")
Assuralia Caisse des Depôts Group	No	cannot be generalised to all undertakings as their applicability depends on the products and circumstances of an undertaking and the nature and scale of the risks. While the first two "good practices" appear reasonable, more clarity is needed on what EIOPA expects concretely with "develop and use forward looking cat modelling". With respect to stress-testing and scenario analysis, the industry believes that maximum flexibility should be given to insurers. Given the great uncertainties in this area, the insurance industry believes that good practices should be based on high-level principles that allow for flexibility. The sector notes that there may be a number of reasons why undertakings do not include explicit climate-change related risk adjustments in their Best Estimate, as evidenced in paragraph 7.32. In particular, the insurance sector agrees with the statement in 7.36 that the annual validation of assumptions is fit for purpose for short duration business. Premium provisions cover claims incurring in the future, and climate changes could potentially affect these future claims. There are two ends to the spectrum: For undertakings with only short-term business (at most one-year duration) and claims with a short settlement period (a few months), only the climate change impact in the following year matters. As climate change is rather small, often accounted for by means of a reinsurance cover for the duration of the contracts. In these cases, a proportional method to implicitly capture climate change effects is the extrapolation of the past development (total development without restriction to natural catastrophe risk) to the future, faking into account materiality aspects. This is already good actuarial practice when calculating technical provisions. For undertakings with long-term business and claims with long-term settlement periods, long-term development may be relevant. Therefore, it should be explicitly captured, also by means of complex methods. Some of the current practices when calculating techni	Agreed. The text in the opinion has been adjusted "when using a forward-looking modelling approach in the calculation of the best estimate, practices should be applied in a manner proportionate to the scale and type of exposures faced by an undertaking".

Name of the organisation	Please elaborate.	Response from EIOPA
SD-M GmbH	See above.	Noted.
ClientEarth	Given that climate change reduces the reliability of historical data, we consider that a forward-looking element is important for assessing climate-related risks. If insurers rely on historical data alone, they will be always be behind the curve. On a related note, the paper makes reference to the theory that general (re)insurers can reprice annually in order to adapt to a changing climate. We would caution against an over-reliance on this approach. It appears to assume climate change will follow a gradual and manageable trajectory. However, we know that climate change is not linear, and may result in abrupt changes and climate tipping points. An over-reliance on repricing also has implications for the protection gap as identified by EIOPA in the paper.	Noted.
Financial Guard Ltd	See answers to Questions 2 and 3.	Noted.
German Insurance Association	The provisions for claims take into account losses that have already oc-curred and whose claims are estimated on the basis of past settlement data. We do not expect that climate change could affect loss settlement. It is insignificant, whether the losses / events were caused by climate change. Therefore, the forward-looking approach is not applicable for claims provisions. The calculation of premium provisions is already be done in a forward-looking manner. Premium provisions are determined from future cash flows. The main factor of the premium provisions is the combined ratio. This ratio includes the expected average claims expenditure for natural catastrophe events. The insurance cover period is of relevance and sets a limit on the time span that needs to be considered. Materiality aspects should be considered, especially against the background that the premium reserve usually is small compared to the overall best estimate. As specified in Q15, life insurers keep a careful check on biometric as-sumptions. Any changes regarding biometric assumptions including trend considerations are taken into account anyhow, insignificant whether they were caused by climate change or by something else. Every driver with a material impact should be reflected. To sum up, any further forward-looking approach is not necessary, for any insurance segment.	Noted.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	Noted.
FERMA - Federation of European Risk Management Associations	n/a	Noted.
German Association of Private		Noted.
Health Insurers (PKV) Allianz SE	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us. Any forward-looking approach should be compliant with actuarial best practice principles. The Solvency II "best estimate" refers to the expected value of the range of possible outcomes. As such forward-looking approaches are already now used for best estimate purposes. The impact of particular scenarios on the best estimate is determined by their likelihood within the set of all scenarios. Additionally the best estimate refers to liabilities arising from existing contracts, which may have durations that are not long enough for climate risks to have an impact. As such we agree with EIOPA that it is important for all climate change considerations to remain proportionate to the scale and type of exposures faced by the undertaking.	Noted.
Investment & Life Assurance Group	ILAG welcomes the proportionality comments in 7.39. Where the exposure is material then best estimate modelling needs to capture the risk. For life insurance, ILAG does not believe that the data needed to calibrate models is sufficient at this time and has a concern that building complex models with poor data could lead to unnecessary prudence being built into best estimates. The cost of prudence may fall on consumers in the form of higher prices, orproduct withdrawal. The risk is better considered as part of the ORSA, where firms can consider the impact of this, and other emerging risks, on the best estimate, risk margin and SCR.	Noted. Regarding the data, EIOPA considers that there is scope for improving data gathering, e.g. by public- private cooperation network. Moreover, in the revised version EIOPA now explicitly mentions the relevance of Pillar 2 ("Therefore, EIOPA also addresses the importance of scenario analysis under Pillar 2, alongside its analysis of Pillar 1 elements")

Question 12: What is your view on adopting a forward-looking modelling approach in the calculation of the best estimate to assess climate change-related risks? Please elaborate.

Vienna Insurance Group AG		Noted.
Wiener Versicherung Gruppe		
Actuarial Association of Europe	range of possible outcomes. One should remember that those catastrophe model can be heavy, and should not been made mandatory unless materiality requires it (major non-life exposure, combined with limited reinsurance). The direct use of scientific literature in setting best estimate assumptions could prove difficult in practice. More than 2000 (full time equivalent) scientists collaborating in IPCC are working on a predictive climate model for decades and still do not know exactly the effects of feedback loops and tipping points. This wide variance in scientific opinions, could lead to wide variations in selected assumptions between entities with similar risk profiles. The major catastrophe models used in the insurance industry can also give significantly divergent results regarding the risk of a single portfolio. However, the use of scientific literature as an aid in understanding the risks and uncertainties in selected assumptions could lead to a better understanding of the best estimate ranges and uncertainties and assist with risk management.	Agreed. EIOPA is of the opinion that further work is needed to help undertakings in defining some quantitative parameters in climated- change related scenarios. EIOPA also recognises that parameters depend on the specifities of each undertaking.
European Savings and Retail Banking Group		Noted
EIOPA insurance and re- insurance stakeholder group	OArt 19 Definitions on data accuracy and appropriateness will not be met if bringing the need to take climate change risks into account in the valuation. The requirement for	Noted. The proportionality aspect is clearly mentioned in the opinion.

		Noted. EIOPA considers
		that there is scope for establishing public- private cooperation frameworks to enhance
Finance Watch	A forward-looking modelling approach would be a welcome addition to ensure that issues around historical loss data are addressed in a robust way.	data gathering and risk assessment, at national,
	However, given the evidence collected by EIOPA and outlined in 7.31, there is clearly a need to implement an approach that ensures the risks arising from the impact of climate change and nature depletion are properly taken into account.	regional or European level. This may reduce
	Articles 2 and 29 of the Delegated Regulation are two areas from where issues could arise, when considered with Article 21 of the Delegated Regulation in the context of sustainability risks. Climate change and nature depletion risks are not likely to be properly taken into account through using historical loss data. In addition there may also currently be issues with the quality and availability of data to use for these risks. Here it would be useful to consider promoting a role for insurers to ensure that plans are put in address issues with lack of data, rather than using it an a default mechanism to resort to approximations to calculate the best estimate.	the economic mismatch in high risk areas, addressing the current protection gap.
	The sector believes that forward-looking modelling presents a range of technical difficulties outside the control of individual insurers. Forward-looking modelling may become highly speculative over long-time and is resource intensive, which raises proportionality issues. The sector notes that all best estimates should already capture relevant sustainability risks based on available information.	
Insurance Europe	The provisions for claims take into account losses that have already occurred and those claims are estimated on the basis of past settlement data. Climate change is not expected to affect loss settlement. It is irrelevant, whether the losses/events were caused by climate change. Therefore, the forward-looking approach is not applicable for claims provisions.	Noted.
	The calculation of premium provisions can be done in a forward-looking manner. Premium provisions are determined from future cash flows. The main factor of the premium provisions is the combined ratio. This ratio includes the expected average claims expenditure for natural catastrophe events. The insurance cover period is of relevance and sets a limit on the time span that needs to be considered. Materiality aspects should be considered, especially against the background that the premium reserve usually is small compared to the overall best estimate. Moreover, for life insurers, climate change could even have some positive effects.	
Assuralia	The sector believes that forward-looking modelling is difficult and overly sophisticated for most insurers to implement.	Noted.
Caisse des Depôts Group	No views	Noted.
AMICE	the insurance policy. For life insurers, climate risk could even have a positive impact. It is worth highlighting that more than 2000 (full time equivalent) scientists collaborating in IPCC are working on a predictive climate model for decades and still do not know exactly the effects of feedback loops and tipping points. Forward-looking evaluations depend on the availability of quantitative trend analysis concerning short and medium term, acknowledged by IPCC and scientists. Furthermore, the third part vendor models should include climate components for Continental Europe too, because until now they have only completed studies related to America and the UK.	Agreed. EIOPA acknowledges that the impact of climate change on life depends on factors such as the lines of business. EIOPA also acknowledges that there is scope for improvement and for establising public-private cooperation framework at national, regional or European level.
GLOBAL WARNING	A forward looking modelling approach should reflect the basic fact, underestimated by most mainstream macroeconomists, that energy is historically at the heart of socio- economic growth, and the immense challenge of decoupling growth and energy. See my study on the Oil-GDP historical coupling : Méthodologie d'analyse des scenarios utilisés pour l'évaluation des risques liés au climat par une approche paradigmatique PIB-Pétrole - Application aux scenarios ESSO (1973) et Agence Internationale de l'Energie (2016) – Chaire Energie et prospérité – Michel LEPETIT - Juin 2018.	Noted.
	A visual moovie of this coupling between world oil supply and world economic growth : http://global-warning.fr/wp-content/uploads/2018/02/KAMA-KARMA-16-02-2018.mp4 See also : http://global-warning.fr/wp-content/uploads/2018/01/Scenarios-World-OILGDP-1950-2040.pdf	

Question 13: What would you consider to be proportionate good practices for such a forward-looking modelling approach in the calculation of the best estimate?

Name of the organisation	Please elaborate.	Response from EIOPA
SD-M GmbH	See above.	Noted.
ClientEarth	It is important that insurers are integrating the best available climate science into their approach.	Agreed. This is mentioned in the opinion.
Financial Guard Ltd	See answers to Questions 2 and 3.	Noted.
German Insurance Association	We agree with EIOPA that the principle of proportionality should be reflected. In this regard, EIOPA refers to the size and maturity of the under-takings' obligations. In our view, not only size and maturity, but also other factors should be taken into account, for example the level of risks connected to those obligations, the nature and the regionality of the insured risks. As mentioned in Q11, a proportional method could be to capture climate change implicitly by extrapolating the past development (total development without restriction to natural catastrophe risk) to the future as good actuarial practice when calculating technical provisions.	Agreed. EIOPA has now better clarified that these good practices should be applied in a manner proportionate to the scale and type of exposures faced by an undertaking
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	Noted.
FERMA - Federation of European Risk Management Associations	n/a	Noted.
German Association of Private Health Insurers (PKV)	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	 We agree with EIOPA that the principle of proportionality should be reflected. In this regard, EIOPA refers to the size and maturity of the undertakings' obligations. In our view, not only size and maturity, but also other factors should be taken into account, for example the level of risks connected to those obligations, the nature and the regional character of the insured risks. Climate change modelling should only be relevant for the best estimate of liabilities with a sufficiently long duration. The use of generally recognized climate change models in reserving should be sufficient to ensure that "good practices" have been met. 	Agreed. EIOPA has now better clarified that these good practices should be applied in a manner proportionate to the scale and type of exposures faced by an undertaking.
Investment & Life Assurance Group	Firms already have good practices for developing forward-looking models to capture changes in the level, trend and volatility of risk drivers resulting from emerging risks. For example, UK models typically allow for changes to mortality rates over time and, where material, some firms have stochastic modelling of mortality.	Noted.
Vienna Insurance Group AG Wiener Versicherung Gruppe	-	Noted.

Actuarial Association of Europe	Forward looking modelling is not part of Solvency II and should not be a general requirement in the calculation of the best estimate. A general requirement for insurance entities should be to: •ēnsure historical data is up-to-date; •consider possible events not captured by the undertaking's historical dataset; •āpply stress-testing or scenario analysis. If capital buffers are adequate, and capital generation is sound, they can absorb unexpected losses, from a variety sources, including climate change. For life insurance, it is not possible, in practice, to explicitly reflect climate change in the calculation of the best estimate due to the scarcity of relevant data and the highly uncertain impact on biometric best estimate assumptions. In a similar way, the impact of future technical or medical advancements on biometrical assumptions or trends cannot be reliably assessed. For undertakings with a significant exposure to natural catastrophe risk, the adoption of catastrophe models (eg windstorm, flood) using granular exposure and risk information as inputs, could provide very useful insight into the particular risks and exposures. However, these models are complex to operate and to understand, as a result they should only be required where exposure to catastrophe risk is material to the solvency of the company. Materiality in this case should be defined both as a percentage of the company's total exposure and in monetary terms, for example by using the standard formula catastrophe charge as a base.	Noted. EIOPA has now better clarified how climate change could impact longer-term life business.
European Savings and Retail Banking Group		Noted.
EIOPA insurance and re- insurance stakeholder group	We agree with EIOPA that the principle of proportionality should be reflected in the calculation of the best estimate via a forward-looking modelling approach. In this regard, EIOPA refers to the size and maturity of the undertakings' obligations. In our view, not only size and maturity, but also other factors should be taken into account, for example the level of risks connected to those obligations. We also find that climate change modelling should only be relevant for the best estimate of liabilities with a sufficiently long duration. The use of generally recognized climate change models in reserving should be sufficient to ensure that "good practices" have been met. We find that EIOPA's idea that the duration of the insurance contract (or an asset, e.g. a corporate bond) could affect the market price or best estimate is a good idea in theory as this might be the outcome in many scenarios. Anyway: •In order to include the way duration (or the contract lifetime) changes the risk profile into the liability, valuation would need a good sense of understanding on how the volatility profile of the scenarios affecting the future cashflows might change in the future. •Some consideration might be needed to justify the long-term growth expectations behind the models. Some of the IPCC scenarios don't opt for long term growth, rather the declining of the GDP in time. Inflation, on the other hand, might be more volatile, even having an effect on the ECB target. •Duration and its impact on the risk profile might already be in the market values of some assets and surely will change a lot in future. The difficulty will be to understand in which ways this works. Is longer duration always a sign of a higher risk profile? Does this change amongst different industries and asset classes?	Agreed. EIOPA has now better clarified that these good practices should be applied in a manner proportionate to the scale and type of exposures faced by an undertaking (ie not limited to size and maturity).
Finance Watch	Any decision on proportionality should be linked to cost-benefit analyses based on quantitative estimates and detail to justify the bases for these estimates.	Noted.

Insurance Europe	The insurance sector agrees with EIOPA that the principle of proportionality needs to be reflected. In this regard, EIOPA refers to the size and maturity of the undertakings' obligations. The risk level connected to those obligations, the nature and the regionality of the insured risks also needs to be considered. In order to avoid excessive burden on small insurers, the introduction of thresholds can be used to exclude them from the most burdensome requirements. For example, in the case of stress testing and scenario analysis, the industry believes that maximum flexibility should be given to insurers to choose how to assess financially material sustainability risks in their processes, either in a quantitative or qualitative way.	Agreed. EIOPA has now better clarified that these good practices should be applied in a manner proportionate to the scale and type of exposures faced by an undertaking.
Assuralia	The insurance sector agrees with EIOPA that the principle of proportionality should be reflected. In this regard, EIOPA refers to the size and maturity of the undertakings' obligations. The stress testing, as mentioned earlier, could be required for large insurance companies. All insurance companies should have the option to assess sustainability risks in the ORSA, using forward-looking models or scenario analysis, supplemented by qualitative methods.	Agreed. EIOPA has now better clarified that these good practices should be applied in a manner proportionate to the scale and type of exposures faced by an undertaking. Moreover, in the revised version EIOPA now explicitly mentions the relevance of Pillar 2 ("Therefore, EIOPA also addresses the importance of scenario analysis under Pillar 2, alongside its analysis of Pillar 1 elements").
Caisse des Depôts Group	No views	Noted.
AMICE	A forward-looking modelling approach is only needed provided climate change has any material impact while the cover of the insurance contract is in force or has influence over the entire run off of the outstanding claims or future cash flows. The question of whether future cash flows are to be adjusted also depends on the reliability of the future developments. The future predication of possible impacts on cash flows should not be based on implausible scenarios. Life insurance would normally be influenced over the longer term, but the impact could be twofold: positive and negative. For non-life insurance with a long duration (i.e. liability line of business) the coverage period and terms and conditions which do apply have to be considered.	Agreed. EIOPA acknowledges that the impact of climate change on life depends on factors such as the lines of business.
GLOBAL WARNING	See other answers	Noted.

Question 14: Do you agree that climate risks may affect the technical provision calculation for the life insurance?

Name of the organisation	Question	Please elaborate.	Response from EIOPA
SD-M GmbH	Yes	No comment.	Noted.
ClientEarth	Yes	Yes, we agree that climate risks may impact on the calculation of the technical provision for life insurers. Climate change is expected to have significant impacts on the health and mortality of the population. Climate change is also anticipated to have significant consequences for the economy. As such, it may impact both insures' liabilities and assets. This is especially the case considering the longer-term nature of life insurance business.	Noted.
Financial Guard Ltd	Yes	See answers to Questions 2 and 3.	Noted.
German Insurance Association	n/a	We think climate risks have only limited impact on technical provision calculation for the life insurance, if any. For instance, future evolution of behaviour change, technological advancement and medical advances can be expected to have a higher influence on the best estimate. And if climate change affects the calculation, it will probably only reduce risks of insurers. Climate change could lead to technical provisions turning out to be too high. For details see Q15 and Q17.	
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	n/a	Noted.
FERMA - Federation of European Risk Management Associations	n/a	n/a	Noted.
German Association of Private Health Insurers (PKV)	sociations n/a n/a Our explanations below relate to health insurance pursued on a similar technical basis to that of life insurance (Health SLT) only (regarding life insurance please see the remarks made by GDV). Technically speaking, climate change is no different from other long-term developments that affect health and mortality - such as medical progress, life expectancy development, wealth that affects lifestyle habits. Climate risks may affect the technical provision calculation for health SLT insurance obligations. In fact, health insurers have the legal obligation to adjust the premium, if the observed mortality or morbidity rates differ from those, which are used within the calculation so far. In Germany the health insurers (PKV) have to check the mortality and the morbidity rates yearly. If there is a sustainable difference of five percent, all calculation bases, not only mortality and morbidity calculation bases, have to be adjusted. A significant impact of climate change on climate risks is hardly to assess as the calculation of the technical provision depends on numerous factors in health insurance. Besides this, visible impacts occur with a longer time lag. However, due to the legal obligation to adjust the premium under certain circumstances, health insurers (PKV) are able to response to changed climate risks in a risk-appropriate way. Thus, a potential climate change is already considered today and possible climate risks are manageable for PKV. Accordingly, there is no different for explorible of the technic of the t		Noted. EIOPA agrees that the potential impact of climate change can already be considered when calculating the technical provisions. But based on the evidence received, EIOPA notes that not all insurance companies are currently taking it into account.

Allianz SE		the financial elements) is required by Solvency II to be market-consistent. This means that the valuation needs to be derived from and be consistent with market prices of those financial instruments available on the asset and derivatives market that could be used to replicate the long-	Partially agreed. EIOPA agrees that the calibration of ESG should be market consistent. EIOPA however, notes that the potential climate change impacts might not have been properly captured by the market. Additionally, EIOPA agrees that the impact
	Yes	lives.	might vary by LoB and geography.
Investment & Life Assurance Group	Yes	This very much depends on the geographic location of the life risks and the level of change. The UK is relatively wealthy and capable of adapting to modest changes in conditions. Overseas life risks are more exposed. Any guidance issued needs to allow for geographic location of the business being valued.	Agreed. EIOPA agrees that the impact is uncertain and depends on factors such as geographic location.
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a		Noted.
Actuarial Association of Europe	No	surrenders and lapses), mortality/morbidity, maintenance expenses and expense inflation. The assumption setting process typically considers any secular trends or new environmental conditions that would influence the expected future experience. Other risk sources like technological developments, demographic trends, loss of biodiversity causing food supply to collapse, and geopolitical risks (war) could have an effect on mortality and morbidity. Identifying emerging tail-risks is an important first step to take. Developing policies to	Agreed. While EIOPA agrees that the effect is uncertain, EIOPA considers that climate change impacts the technical provision calculation. EIOPA acknowledges that the other factors mentioned will also play a role.
European Savings and Retail Banking Group	n/a	_	Noted.
EIOPA insurance and re- insurance stakeholder group	Yes		Agreed. EIOPA agrees that the impact is uncertain and depends on factors such as geographic location.
Finance Watch	Yes	Yes. Potentially already existing issues around under-reserving and under-capitalisation by insurers could be exacerbated by the impact of climate change and nature depletion. The ESRB has outlined concerns over potential underestimations of insurer's technical provisions. This is of particular relevance given that a large amount of insurers own funds that is made up of expected profits from future premiums, another element that could be impacted by climate and environment.	Noted.

Insurance Europe	No	In principle, climate risks may impact some assumptions used in the calculation of life technical provisions, eg mortality for elderly/fragile people may increase due to heatwaves and natural catastrophes (unrelated to age and health). However, the extent to which this will affect mortality tables is not clear and positive effects for some insurers are also possible. Nevertheless, this is probably going to be a less significant risk in Europe in comparison with other continents (see answer to Q15).	Partially agreed. While EIOPA agrees that the effect is uncertain, EIOPA considers that climate change impacts the technical provision calculation. EIOPA acknowledges that this will vary by geographic location.
	No	In principle, climate risks may impact some assumptions used in the calculation of life technical provisions e.g. elderly/fragile people may die more often due to heatwaves and possibly more deaths due to natural catastrophes (random, unrelated to age and health). This is probably going to be a less significant risk in Belgium in comparison with other countries.	Partially agreed. While EIOPA agrees that the effect is uncertain, EIOPA considers that climate change impacts the technical provision calculation. EIOPA acknowledges that this will vary by geographic location.
Caisse des Depôts Group	n/a	No views	Noted.
AMICE	Yes	Yes, that could have an effect. However, the impact would be difficult to estimate. For example, given that climate change could lead to warmer summers. the mortality rates could be generally higher; but the extent to which this will affect mortality tables will be difficult to assess. It is worth noting that mortality rates can affect insurers in two opposite ways. A death at a certain moment triggers a certain liability (for example paying for a funeral or paying a widow's pension), but it also releases other liabilities (such as the technical provisions for the pension payable to the deceased in the future).	Agreed. EIOPA agrees that the impact is uncertain.
GLOBAL WARNING	No	N/A/	Noted.

Do you agree that the two main assumptions/areas where climate may impact the calculation of life technical provisions are the Economic Scenario Generators and the mortality rates? What about morbidity rates?

Name of the organisation	Do you ag	Please elaborate.	
SD-M GmbH	Yes	All of these rates might change in the long-term.	Noted.
ClientEarth		We agree that Economic Scenario Generators and mortality rates may be impacted by climate change. Current predictions of climate impacts would also suggest morbidity rates will be affected. For instance, climate change is expected to facilitate the spread of certain vector-borne diseases such as malaria. A further example is the propensity of climate change and pollution to lead to a higher instance of respiratory disease. Again, we believe that best available science should be used to inform potential impacts.	Noted.
Financial Guard Ltd	Yes	Morbidity may also be more expensive for society, for those needing care.	Noted.

German Insurance Association		Future developments of mortality rates are already considered in calculation of the best-estimate life technical provision. Mortality rates are influenced by several aspects and climate is not the most important one. Life insurers keep careful check on mortality and morbidity assumptions. Any substantial change in the best-estimate will regularly be considered. For further details see Q17. We do not see any impact to morbidity rates with relevance to life and invalidity insurance issues. We do not really agree that the Economic Scenario Generators is a main area where climate may substantially impact the calculation of life tech-nical provision (please refer to Q16 for more	Partially agreed. EIOPA agrees that the potential impact of climate change can already be considered when calculating the technical provisions, including the developments in mortality rates. But based on the evidence received, EIOPA notes that not all insurance companies are currently taking it into account.
Association of German Public	11/a		
Insurers - Verband öffentlicher			Noted.
	n/a	n/a	Noted.
FERMA - Federation of			
European Risk Management			Noted.
	n/a	n/a	
German Association of Private	17.4		
	Yes	The morbidity rates could be affected by climate (change) as well.	Noted.
Allianz SE		minimum interest rate guarantees on paid premiums) are valued consistently with actually traded stand-alone financial options available in the derivatives market. This consistency is a fundamental requirement of Solvency II as a market value based regime. The economic scenarios (consisting of time-paths of financial risk factors such as interest rate level and volatility at different maturities, equity index levels and volatility, fx level and volatility, option prices and volatility, etc.) for valuation of liabilities are determined such that they reproduce the current market value of traded financial options (as the average over all scenarios). Then these scenarios are applied to the payout pattern	Agreed. EIOPA agrees that the calibration of ESG should be market consistent. EIOPA however, notes that the potential climate change impacts might not have been properly captured by the market.
Investment & Life Assurance Group		If climate change results in extreme weather events, or changes to the economy, then asset volatility and death rates are two assumptions that are likely to be affected. If climate change results in new diseases, such as malaria, becoming common in the UK then morbidity could change.	Noted.
Vienna Insurance Group AG			Noted.
Wiener Versicherung Gruppe	n/a	-	
Actuarial Association of Europe		No, climate risks are unlikely to impact these two main assumptions in any material or instantaneous way. Please refer to our answers regarding Q16 and Q14/Q17.	Noted
European Savings and Retail			Noted.

EIOPA insurance and re- insurance stakeholder group	A insurance and re- nce stakeholder group A insurance and re- ninimum interest rate guarantees implicitly included in life insurance policies (such as for example stand-alone financial options available in the derivatives market. This consistency is a fundamental change impacts not have been a insurance and re- stat the impact of the termined such that they reproduce the current market value of traded financial not have been		Agreed. EIOPA agrees that the impact is uncertain. Additionally, while EIOPA agrees that the calibration of ESG should be market consistent, EIOPA notes that the potential climate change impacts might not have been properly captured by the market
Finance Watch	Yes	EIOPA should expand its view on the issues posed by climate risk and climatic events outlined in 7.42 to include the risks associated with nature depletion and eco-system disruption. This should be linked to the principle under 7.38 of the 'best science available', which EIOPA could help to qualify. EIOPA should be encouraged to further consider these risks are included in life best estimates as indicated in 7.43. However, EIOPA should also clarify how this will be undertaken and what the responsibility and role of insurers would be in addressing difficulties in valuing liabilities.	Noted.
Insurance Europe	No	the most important one. Furthermore, the insurance sector does not see any impact to morbidity rates with relevance to life and invalidity insurance issues. Life insurers keep careful check on mortality and morbidity assumptions. Any substantial change in the best estimate is regularly considered. If there is reliable quantitative	Noted. EIOPA agrees that the potential impact of climate change can already be considered when calculating the technical provisions, including the developments in mortality rates. But based on the evidence received, EIOPA notes that not all insurance companies are currently taking it into account.

Assuralia	No	Future developments of mortality rates are already considered in the calculation of the best- estimate life technical provisions. Mortality rates are influenced by several aspects and climate is probably not the most important one. Furthermore, we do not see any impact in Belgium to morbidity rates with relevance to life and invalidity insurance issues. Life insurers keep careful check on mortality and morbidity assumptions. Any substantial change in the best estimate is regularly considered.	Partially agreed. While EIOPA agree that mortality rates are impacted by different factors, EIOPA considers that climate change has an impact.
Caisse des Depôts Group	n/a	No views	Noted.
AMICE	No	For morbidity rates, the impact would be very difficult to establish and for general assumptions to be changed, a trend has to be recognised.	Noted.
GLOBAL WARNING	Yes	see on ESG	Noted.

Question 15: Is climate change relevant for Economic Scenario Generators?

Name of the organisation	Question 3:	If yes, how could climate change be included in Economic Scenario Generators?	If not, please elaborate.	Response from EIOPA
SD-M GmbH		No comment.		Noted.
ClientEarth	Yes	We consider that climate change is relevant for Economic Scenario Generators as it is expected to have a significant impact on the global economy. Again, we would recommend that academic research is a good starting point for understanding potential consequences. For instance, a paper published in Nature in 2015 projected that there was a 51% chance of climate change reducing the World's GDP per capita by more than 20% by 2100, and a 12% chance of reducing it by more than 50% (http://web.stanford.edu/~mburke/climate/BurkeHsiangMiguel2015.pdf).		Noted.
Financial Guard Ltd	Yes	See answers to Questions 2 and 3.		Noted.
German Insurance Association	No		In our view climate change is not substantially relevant for Economic Scenario Generators (ESG). As mentioned by EIOPA before, the core principle of Solvency II is a market-consistent valuation of technical liabilities. Therefore, calibration of an ESG should be based on observed market values.	Partially agreed. EIOPA agrees that the calibration of ESG should be market consistent. EIOPA, however, notes that the potential climate change impacts might not have been properly captured by the market.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a			Noted.
FERMA - Federation of European Risk Management Associations	n/a			Noted.
German Association of Private Health Insurers (PKV)	n/a			Noted.
Allianz SE	No		SCR calculation climate change is currently not	Partially agreed. EIOPA agrees that the calibration of ESG should be market consistent. EIOPA, however, notes that the potential climate change impacts might not have been properly captured by the market
Investment & Life Assurance Group	Yes	Asset prices allow for future risk and volatility. Market consistent ESG calibrations will, therefore, allow for climate change and other risks as they emerge. Further adjustments to ESGs for this, or other risks, goes against a market consistent approach. There is also the potential for double counting climate risk in the ESG if it is allowed for in the market prices used to calibrate the ESG and then again as an explicit adjustment.		Partially agreed. EIOPA agrees that the calibration of ESG should be market consistent. EIOPA, however, notes that the potential climate change impacts might not have been properly captured by the market
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a			Noted.

			we believe that climate change is not sub relevant for Economic Scenario Generator and that it is not clear how the ESG should changed to better incorporate climate chan considerations. On one hand, the core pri Solvency II is a market-adjusted valuation liabilities. Therefore, the calibration of Eco Scenario Generators is based on the curre prevailing level and volatility of the asset/d market. As such the effect of climate chan implicitly accounted for to the extent it has asset/derivatives market values. Other that is currently no quantitative basis on which climate change in the calibration of Econo
EIOPA insurance and re- insurance stakeholder group	No		Scenario Generators. On the other hand, we also consider that of change is relevant for these scenarios as expected to have a significant impact on the economy through economic/financial lossed change has several elements with financial such as physical and transition risks, but a presents opportunities such as those occur resilience, competitiveness, and sustainable models. Again, we note that academic resi good starting point for understanding pote consequences. For instance, a paper public Nature, in 2015, projected that there was a chance of climate change reducing the We per capita by more than 20% by 2100, and chance of reducing it by more than 50% (http://web.stanford.edu/~mburke/climate/ Miguel2015.pdf). Similar studies were public
Finance Watch	Yes	A key point is that Economic Scenario Generators may be extremely useful, but their use may significantly impacted by regulatory regimes that companies fall under. EIOPA would need to ensure here that ESG are used to help provide projections for longer time horizons, than what may currently often be 1 -5 years. EIOPA should also look into how far there is a reliance by insurers on the same third-party provided Economic Scenario Generators.	CDD (Climete ebonge report for 2019) bri

UStantially	
ors (ESG)	
ld be	
ange	
rinciple of	
n of technical	
onomic	
rently	
derivative	
inge is	
s impacted	
an that, there	
h to include	
omic	Noted. we agree that the calibration
climate	of ESG should be market consistent.
s it is	We, however, note that the potential
the global	climate change impacts might not
ses. Climate	have been properly captured by the
ial relevance,	market.
also	
curring from	
able business	
search is a	
ential	
blished in	
a 51%	
Vorld's GDP	
nd a 12%	
/BurkeHsiang	
blished by	
	Noted.

GLOBAL WARNING	Yes	I am not sure about the mortality rate, or the morbidity rate. Much more academic work should be done on the use of Economic Scenario Generator, in order to take into account the transition scenarios toward a low carbon economy. This is certainly an interesting field of urgent research		Noted.
AMICE	Yes	Yes, it could be relevant, especially for life technical provision valuations; given the very long-time horizon of the projections for the valuation of the life liabilities, a trend in actuarial scenarios should be considered to include climate change impacts.		Noted.
Caisse des Depôts Group	n/a	Veg. it could be relevent conscience for life technical provision valuations, given the very large time.		Noted.
Assuralia	No		Generators. As mentioned by EIOPA before, the core principle of Solvency II is a market-consistent valuation of technical liabilities. Therefore, calibration of an ESG should be based on observed market-	Partially agreed. EIOPA agrees that the calibration of ESG should be market consistent. EIOPA, however, notes that the potential climate change impacts might not have been properly captured by the market.
Insurance Europe	No		Insurance Europe notes that under a risk neutral	Partially agreed. EIOPA agrees that the calibration of ESG should be market consistent. EIOPA, however, notes that the potential climate change impacts might not have been properly captured by the market.

Question 16: Is the impact of climate change relevant on the mortality rates?

Name of the organisation	Question 10	If yes, how could climate change be included in mortality rates?	If no, please elaborate.
SD-M GmbH	Yes	See current heat waves in Europe.	
ClientEarth	Yes	Yes, we consider that climate change is relevant to mortality rates. For instance, recent heat waves have led to high instances of premature death in Europe and are anticipated to increase in frequency and intensity. Natural disasters such as flooding may also impact on mortality.	
Financial Guard Ltd	n/a		
German Insurance Association	No		Among many other factors, mortality can also be influenced by the weather. In the past, cold or very high temperatures have led to a short-term increa mortality. This could be especially true for sudden extremes without prior habituation. Climate chang could lead to such situations occurring more frequ in the future. However, increased mortality does n affect everyone equally. It mainly affects children elderly people who have already been weakened. Therefore, term life insurances are hardly affected annuity insurance, on the other hand, the future mortality rates assumed in the projections could possibly turn out to be somewhat too low. In this of the calculated technical provisions would turn out conservative and overstated. However, the effect described is very uncertain and should for pruden reasons not be included in today's calculations.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a		
FERMA - Federation of European Risk Management Associations	n/a		
German Association of Private Health Insurers (PKV)	Yes	Among many other factors, mortality can also be influenced by the weather. In the past, cold or very high temperatures have led to a short-term increase in mortality. This could be especially true for sudden extremes without prior habituation. Climate change could lead to such situations occurring more frequently in the future. However, increased mortality does not affect everyone equally. It mainly affects children or elderly people who have already been weakened. Therefore, health insurances are hardly affected. Health insurers have to check the mortality and the morbidity rates in Germany yearly. If there is a sustainable difference of five percent, all calculation bases have to be adjusted. Thus, climate change and climate risks are manageable for health insurers.	
Allianz SE	Yes	This will depend on (i)the exact way climate change will materialize, e.g. weather extremes vs. generally increasing temperature, geographical, vs. global impacts etc. (ii)the available means to compensate the respective effects on people's lives	

	Response from EIOPA		
	Noted.		
	Noted.		
	Noted.		
be very crease in den ange requently es not ren or ned. cted. For re ld nis case, out to be fect dence s.	Partially agreed. While EIOPA agrees that the impact is unclear, EIOPA considers mortality rates will be affected by climate change.		
	Noted.		
	Noted.		
	Agreed. EIOPA agrees that the impact is unclear and that it might differ depending on the region.		
	Agreed. EIOPA agrees that the impact is unclear and that it might differ depending on the region.		

Investment & Life Assurance Group	Yes	In the short to medium term, modest changes in global temperatures are unlikely to have much impact. Longer term, warmer winters may reduce deaths, warmer summers may increase deaths. If the economy is weakened because resources are diverted to respond to global warming then healthcare may deteriorate. An increased frequency and severity of extreme weather events will have some impact with vulnerable groups, such as the elderly. The UK is a wealthy economy and will be likely adapt to changes in conditions, so the overall impact is expected to be small. In poorer parts of the world where governments and health care systems are less able to respond the impact on mortality may be material. Climate is one of many emerging risks. Other risks such as antibiotics becoming ineffective could have a more material risk to mortality rates than modest changes to the climate.		Agreed. E unclear a the regior
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a			Noted.
Actuarial Association of Europe	No		See answers to questions above. In our opinion, key factors regarding mortality rates in Europe include medical progress, social security schemes or geopolitical stability. We believe mortality assumptions are set according to the use and need of the model itself – so typically with a larger uncertainty factor combining all risk elements for longer duration projections	Partially a impact is rates will EIOPA ac mentioned
European Savings and Retail Banking Group	n/a			Noted.
EIOPA insurance and re- insurance stakeholder group	No		relevant for Economic Scenario Generators (ESG) and that it is not clear how the ESG should be changed to better incorporate climate change considerations. On one hand, the core principle of Solvency II is a market- adjusted valuation of technical liabilities. Therefore, the calibration of Economic Scenario Generators is based on the currently prevailing level and volatility of the asset/derivative market. As such the effect of climate change is implicitly accounted for to the extent it has impacted asset/derivatives market values. Other than that, there is currently no quantitative basis on which to include climate change in the calibration of Economic Scenario Generators. On the other hand, we also consider that climate change is relevant for these scenarios as it is expected to have a significant impact on the global economy through economic/financial losses. Climate change has several elements with financial relevance, such as physical and transition risks, but also presents opportunities such as those occurring from resilience, competitiveness, and sustainable business models. Again, we note that academic research is a good starting point for understanding potential consequences. For instance, a paper published in Nature, in 2015, projected that there was a 51% chance of climate change reducing the World's GDP per capita by more than 20% by 2100, and a 12% chance of reducing it by more than 50% (http://web.stanford.edu/~mburke/climate/BurkeHsiang Miguel2015.pdf). Similar studies were published by CDP (Climate change report for 2018) bringing an	This com question o

	Agreed. EIOPA agrees that the impact is unclear and that it might differ depending on the region.
	Noted.
opinion, key e include s or t according to typically with isk elements	Partially agreed. While EIOPA agrees that the impact is unclear, EIOPA considers mortality rates will be affected by climate change. EIOPA acknowledges that the other factors mentioned will also play a role.
	Noted.
bistentially ors (ESG) and e changed to erations. On II is a market- Therefore, the tors is based ility of the ct of climate extent it has bother than is on which to of Economic climate it is expected economy te change ance, such as sents m resilience, a good olished in a 51% /orld's GDP d a 12% /BurkeHsiang blished by inging an papies by	This comment seems to relate to the previous question on Economic Scenario Generators. While EIOPA agrees that the calibration of ESG should be market consistent, EIOPA notes that the potential climate change impacts might not have been properly captured by the market.

GLOBAL WARNING	No		N/A	Noted.
AMICE	Yes	Yes, we believe it could be relevant. see answer to question 14. However, including climate change in mortality rates would be very difficult and probably unreliable Alternatively, re/insurers could develop scenarios around this topic in their ORSA projections which may assess the vulnerability towards climate change.		Agreed. EIOPA agrees that the impact is unclear and that scenario analysis is a helpful tool to understand the impact of climate change.
Caisse des Depôts Group	n/a			Noted.
Assuralia	No		For Belgium, in the short to medium term, it is unlikely that climate change will have any significant impact as there are no historically observed effects. Even if there were channels through which climate change would affect mortality rates, it would be very difficult to accurately capture these mechanisms in these rates.	Partially agreed. While EIOPA agrees that the impact is unclear, EIOPA considers mortality rates will be affected by climate change.
Insurance Europe	No		In the short to medium term, it is unlikely that climate change will have any significant impact. Climate change may have a wide range of effects on mortality drivers: decreased winter-related mortality (eg illness, exposure) alongside increased summer-related mortality (eg heatwave). The overall effect of climate change on mortality rates will be difficult to capture given current data availability and models.	Partially agreed. While EIOPA agrees that the impact is unclear, EIOPA considers mortality rates will be affected by climate change.
Finance Watch	Yes	There appear to be are a number of examples of efforts under way by actuaries to update their mortality tables for the impact of climate change. See 'Climate Change for Actuaries: An Introduction' by the Climate Change Working Party, IAEW, 25 March 2019 and 'Climate Change and Mortality', International Actuarial Association, November 2017. New data and scenarios arising from these initiatives should be incorporated into prudential models.		Noted.

Question 17: Do you identify other relevant practices to include sustainability risks in (re)insurers' investment strategy and decisions?

	Question 17: Do you identify other relevant practices to include sustainability risks in	
Name of the organisation	(re)insurers' investment strategy and decisions?	Response from EIOPA
SD-M GmbH	Integration of standardized material ESG KPIs in standard equity and corporate bonds indices through over-/underweighting, e.g. EURO iSTOXX 50 SD-KPI, iSTOXX Europe 50 SD-KPI, iSTOXX Europe 600 SD-KPI.	Noted.
ClientEarth	We consider that stewardship is of vital importance in managing sustainability risks. This was previously highlighted by EIOPA in their technical advice to the EU Commission on integration of sustainability risks. Financial regulators such as the UK's FCA are advancing the debate on the minimum stewardship expectations of financial services firms which invest for clients and beneficiaries should be (see Discussion Paper DP19/1: https://www.fca.org.uk/publication/discussion/dp19-01.pdf). This topic is equally relevant to the present discussion of (re)insurers' investment strategies.	Noted.
Financial Guard Ltd	No, but feel we should.	Noted.
German Insurance Association	No.	Noted.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	Noted.
FERMA - Federation of European Risk Management Associations	n/a	Noted.
German Association of Private Health Insurers (PKV)	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	No	Noted.
Investment & Life Assurance Group	No	Noted.
Vienna Insurance Group AG Wiener Versicherung Gruppe	-	Noted.
Actuarial Association of Europe	Preliminary remark (Q18 – Q21): The availability of a common taxonomy, at least at the European level, and preferably at a global level, is an important prerequisite to facilitate the integration of sustainability considerations in undertakings' investment practices. It is essential to bring transparency and to facilitate appropriate investment practices especially in those undertakings with less resources. Best-in-Class is another relevant practice that is not mentioned in the consultation paper so far. Here, for each industry sector, the most sustainable representatives are identified. In contrast to the exclusion strategy, investment into non-sustainable industries are still possible.	Noted. EIOPA acknowledges that the EU taxonomy will imporove the efforts to consider sustainability risks. However, EIOPA is aware that further work is needed. Agreed on the best-in- class practice.
European Savings and Retail Banking Group	-	Noted.

EIOPA insurance and re- insurance stakeholder group	We consider that stewardship is another important practice in managing sustainability risks. This was previously highlighted by EIOPA in their technical advice to the EU Commission on integration of sustainability risks. Financial regulators such as the UK's FCA are advancing the debate on the minimum stewardship expectations of financial services firms which invest for clients and beneficiaries should be (see Discussion Paper DP19/1). This topic is equally relevant to the present discussion of (re)insurers' investment strategies. ESG integration is often used in active strategies, but also in passive. Often a combination of ESG research providers and in-house research is used for decision making. Instead of outright exclusion, in many cases engagement is used, where investors aim to influence the investee companies to develop in a more sustainable way. Some investors use time frames, e.g. after two years, if no development has taken place, the last resort will be exclusion. For passive investments, several insurance companies rely on ESG indexes which are often at least partly tailor made to align with the companies' investment policy, by e.g. MSCI.□	Agreed. EIOPA considers stewardship to be one of the key underlying principles to support sustainable investing. See EIOPA's previous advice on sustainability in Solvency II, submitted to the European Commission end April 2019. EIOPA supports the need for transparency to consider sustainability risks in investments.
Finance Watch	See FSG, 'How Insurers Gain Competitive Advantage by Better Addressing Society's Needs', June 2017. As well as targeting investment opportunities to reduce protection gaps or target prevention, insurers can also avoid investments that are counter-productive. Insurers could put this into	Agreed. EIOPA considers stewardship to be one of the key underlying principles to support sustainable investing. See EIOPA's previous advice on sustainability in Solvency II, submitted to the European Commission end April 2019. EIOPA supports the need for transparency to consider sustainability risks in investments.

	No	
Insurance Europe	No. Increased transparency and targeted information on companies are crucial prerequisites to include sustainability risks in the investment strategy. This will also improve not only the consideration of sustainability risks as required in the prudent person principle, but also their consideration in the insurers' risk assessments. In this respect, EIOPA presents broad practices to include sustainability risks in (re)insurers' investment strategy and decisions. Although somewhat overlapping, Insurance Europe would like to draw attention to the following classification of Socially Responsible Investment (SRI) by Eurosif, a European association for the promotion and advancement of sustainabile and responsible investment across Europe (which also closely aligns with other frameworks available to the industry): 1. Sustainability themed investment 2. Best-in-Class investment selection 3. Exclusion of holdings from investment universe 4. Norms-based screening 5. ESG Integration factors in financial analysis 6. Engagement and voting on sustainability matters 7. Impact investing Based on the above classification, Eurosif's collects data on investors' use of SRI strategies and presents it in a public report. Other existing references and classifications which guide insurers' sustainable investment strategy include: UN guiding principles on business and human rights OECD MNE guidelines and national business recommendations Equator principles	Noted. EIOPA acknowledges that the EU taxonomy will improve the efforts to consider sustainability risks. However, EIOPA is aware that further work is needed.
Assuralia		Noted. EIOPA acknowledges that the EU taxonomy will improve the efforts to consider sustainability risks. However, EIOPA is aware that further work is needed.
Caisse des Depôts Group	No views	Noted.
AMICE	Sustainability risk is included in the prudent person principle and the risk assessment employed by insurers.	Noted.
GLOBAL WARNING	N/A	Noted.

Question 18: Do you have any further views on the analysis of returns on sustainable assets?

Name of the organisation	Question 18: Do you have any further views on the analysis of returns on sustainable assets	Response from EIOPA
SD-M GmbH	Integration of standardized material ESG KPIs in standard equity and corporate bonds indices	Noted.
	through over-/underweighting led to financial outperformance in the long-term.	
ClientEarth Financial Guard Ltd	- No	Noted. Noted.
	Insurers' approach to investing is not different for sustainable assets compared to any other investments. Insurers have a duty of diligence and care for their policyholders, and this duty applied to all types of assets they invest in.	Noted.
German Insurance Association	The investment assessment is multifactorial. The matching of assets and liabilities, the risk-return profile and the level of market risk are among the key factors that are taken into account when deciding on the asset allocation. Sustainability is also increasingly becoming relevant in the execution of asset allocation policies of insurers.	Agreed.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	Noted.
FERMA - Federation of European Risk Management Associations	n/a	Noted.
German Association of Private Health Insurers (PKV)	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	profile and the level of market risk are among the key factors that are taken into account when deciding on the asset allocation. Sustainability is also increasingly becoming relevant in the execution of asset allocation policies.	Agreed.
Investment & Life Assurance Group	Our view is that analysis of returns on sustainable assets should be no different from that for non- sustainable assets. Moreover, we note that disinvestment of non-sustainable investments does not necessarily impact capital flows towards sustainable assets. All that happens is that one investor sells the asset to another investor.	Noted.
Vienna Insurance Group AG Wiener Versicherung Gruppe	-	Noted.
Actuarial Association of Europe	The study "ESG and Financial Performance: Aggregated Evidence from more than 2,000 Empirical Studies" by Gunnar Friede, Timo Busch, Alexander Bassen, published in the Journal of Sustainable Finance & Investment, 2015, Vol. 5, No. 4, 210–233, concludes "ESG investing is for all kinds of rational investors a way to fulfil their fiduciary duties and could better align investors' interests with the broader objectives of society. There are no performance disadvantages when implementing sustainability in the assets" DWS's Gunnar Friede has performed, in collaboration with the university of Hamburg, a meta study "ESG & Corporate Financial Performance: Mapping the global landscape" concerning the relationship between reporting of ESG data and performance in 2015. The study was endorsed by all the major initiatives like PRI. In the meantime, this study has become the standard study in this respect. We note that market prices in theory incorporate all available information. Thus, potentially different return expectations have already been taken into account in the market price. the returns should be similar. Please note that the only relevant returns in a Solvency II setting are the risk-neutral returns used for valuation. As a result, we do not see how different return expectations, if they exist, could materially impact Solvency II-valuations.	Noted. EIOPA states that Solvency II assumes that market prices reflect all relevant risks. In order for market prices to better reflect the sustainability risks and factors, further improvements in the availability and quality of information relevant to their valuation is needed.
European Savings and Retail Banking Group	-	Noted.

matching of assets and liabilities, the risk-return profile and the level of market risk are among the key factors that are taken into account when deciding on the asset allocation. Sustainability is becoming increasingly relevant in insurers' strategic asset allocations.		Agreed.
Finance Watch	-	Noted.
Insurance Europe	No. Sustainable investments are subject to the same targets and measures of expected return as any other investments. Insurers' approach to investing is not different for sustainable assets compared to any other investments. Insurers have a duty of diligence and care for their policyholders, and this duty applies to all types of assets they invest in. The investment assessment is multifactorial. The matching of assets and liabilities, the risk-return profile and the level of market risk are among the key factors that are taken into account when deciding on the asset allocation. Sustainability is also increasingly becoming relevant in the execution of asset allocation policies of insurers.	Agreed.
Assuralia	The Belgian market agrees with EIOPA, sustainable investments are subject to the same targets and measures of expected return as any other investments. Insurers' approach to investing is not different for sustainable assets compared to any other investments. Insurers have a duty of diligence and care for their policyholders, and this duty applies to all types of assets they invest in. The investment assessment is multifactorial. The matching of assets and liabilities, the risk-return profile and the level of market risk are among the key factors that are taken into account when deciding on the asset allocation. Sustainability is also increasingly becoming relevant in the execution of asset allocation policies of insurers.	Agreed.
Caisse des Depôts Group	No views	Noted.

AMICE	Firstly, the taxonomy is focused on the definition of sustainable investments and it is therefore crucial that the taxonomy is finalised before amending the current framework. Sustainability is a very popular word, a container concept and a marketing term subject to rapidly changing public opinion. Something which is deemed sustainable today could and probably would become unsustainable tomorrow. So, speaking of sustainable assets is not precise enough. It should be something like a currently customer-perceived relative sustainable asset to indicate the transiency and subjectivity of the perception on top of its relative nature. Something is often perceived as sustainable only when compared with something else and it becomes more complex if more factors enter into the equation. For example, using gas is more sustainable than using coal; but diesel fuel emits less CO2 than gasoline, though most diesel cars emit more pollutants than gasoline cars. And the geographical location also plays a role. In the countryside pollutants will settle out without harming the population. Furthermore, in certain areas fossil fuel is the only option. Implementing a framework on a rapidly moving target is very difficult. Secondly, it would be necessary to pay attention to the effects that any new legislation on sustainability could have on the prices of ESG assets. New rules, taxonomy and sustainable asset? classification criteria could lead to a misalignment between market prices and fundamentals. This misalignment could also create a distortion of the market expectations, and lead to speculative practices and speculative bubbles. Additionally, there are controversial results regarding sustainable asset returns. This consultation paper in particular shows that there is no clear evidence on ESG asset returns, and other researchers' and institutions' analyses are provided in absence of a clear ESG Taxonomy.□	Noted.
GLOBAL WARNING	N/A	Noted.

Question 19: To what extent do you align your investment strategy and decisions with your underwriting practice and decisions in respect of sustainability risks?

Name of the organisation	Question 19: To what extent do you align your investment strategy and decisions with your underwriting practice and decisions in respect of sustainability risks?	Response from EIOPA
SD-M GmbH	No comment.	Noted.
ClientEarth	-	Noted.
Financial Guard Ltd	NA	Noted.
German Insurance Association	As this is a company specific question, we cannot give an answer for the German insurance industry.	Noted.
Association of German Public		
Insurers - Verband öffentlicher		Noted.
Versicherer (VöV)	n/a	
FERMA - Federation of		
European Risk Management		Noted.
Associations	n/a	
German Association of Private	Regarding this question we would like to refer to the statement filed by the German Insurance	Noted.
Health Insurers (PKV)	Association (GDV) which is supported by us.	noted.
Allianz SE	A description of our approach to aligning investment and underwriting in terms of sustainability risks is available on our webpage (https://www.allianz.com/en/sustainability/business-integration/esg-approach.html). We have defined ESG processes in order to capture investments and underwriting. E.g. the ESG Referral Process which identifies potentially critical transactions in 13 sensitive business areas considered material by Allianz. All potentially sensitive business is screened on a transaction-by-transaction basis and referred for a detailed ESG assessment, if necessary. This is applicable on the investment (non-listed) side as well as on the insurance business.	Noted.
Investment & Life Assurance Group	N/A	Noted.
Vienna Insurance Group AG		Noted
Wiener Versicherung Gruppe	-	Noted
Actuarial Association of Europe	As an Actuarial Association, we cannot express ourselves on particular companies' strategy. We nevertheless anticipate that, at least under both customer and regulation pressure, sustainability risk will be increasingly taken into account in investment and underwriting strategy. Sustainability is getting more and more important in these decisions. If the EU taxonomy is finalised, the importance of sustainability will certainly grow.	Noted
European Savings and Retail Banking Group		Noted
EIOPA insurance and re- insurance stakeholder group	For consistency between the valuation of assets and liabilities, insurers must ensure the climate change scenarios assumed in the valuations of assets and liabilities are consistent. For example, if an insurer uses the market value of assets then it must use the climate path implied by the asset values in the valuation of its liabilities. One description of an approach to aligning investment and underwriting in terms of sustainability risks can be found from Allianz (https://www.allianz.com/en/sustainability/business-integration/esg-approach.html). They have defined ESG processes in order to capture investments and underwriting. E.g. the ESG Referral Process which identifies potentially critical transactions in 13 sensitive business areas considered material by Allianz. All potentially sensitive business is screened on a transaction-by-transaction basis and referred for a detailed ESG assessment, if necessary. This is applicable on the investment (non-listed) side as well as on the insurance business.	Agreed. EIOPA notes that where insurers have long- term assets to match long term liabilities, they should consider whether climate change would impact either their ability to hold these assets over that time frame or their expected cash-flows.
Finance Watch	 -	Noted.
Insurance Europe	-	Noted.
Assuralia	In general, Belgian companies do not align the investment and underwriting strategy in respect of sustainability risks.	Noted.
Caisse des Depôts Group	No views	Noted.



AMICE	The practice around sustainability is aligned. Investment strategies are not established in isolation but are part of structured ALM processes. Any impact of sustainability on the insurance liabilities and other liabilities of an insurer will have their impact on the assets backing the liabilities. Statements from insurers and/or commitments to initiatives ensure certain investments are avoided, such as investments in tobacco companies or the weapon industry. Sustainability considerations are another limitation in the investment possibilities/opportunities.	Noted.
GLOBAL WARNING	N/A	Noted.



Question 20: Which good practices do you identify to deal with transition and physical risks in (re)insurers asset portfolios?

Question 20: Which good practices do you identify to deal with transition and physical risks	
	Response from EIOPA
	Noted.
Good practice in dealing with transition and physical risk should cover both the analysis and management of risk. With regard to analysis of risk, there are a range of tools being developed. For instance, ClimateWise has published physical and transition risk frameworks for (re)insurers. Furthermore, the Bank of England has recently released a framework for assessing the financial impacts of physical risk. With regard to management of risk, we consider that exclusion policies, inclusion policies and stewardship strategies should all play a role.	Noted.
NA	Noted.
Insurers' approach to investing is not different for sustainability risks com-pared to any other risks. Insurers have a duty of diligence and care for their policyholders, and this duty applies to all types of assets they invest in. Already now it is the task within the prudent person principle to address sustainability risks in the assessment of investments, if they are financially relevant. The consideration of sustainability factors could be part of a general risk/return assessment of assets.	Noted. See EIOPA's advice on sustainability in Solver II submitted to the European Commission end April 2019.
n/a	Noted.
n/a	Noted.
Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Insurers' approach to investing is not different for sustainability risks compared to any other risks. Insurers have a duty of diligence and care for their policyholders, and this duty applied to all types of assets they invest in. Already now it is the task within the prudent person principle to address sustainability risks in the assessment of investments, if they are financially relevant. The consideration of sustainability factors should be part of a general risk/return assessment of assets.	Noted. See EIOPA's advice on sustainability in Solver II submitted to the European Commission end April 2019.
	Noted.
No response	
-	Noted.
We agree with 8.22 and 8.23 in the consultation paper. Overall the general problem is to identify	Agreed.
relevant data and to collect it for analysis.	
· · · · · · · · ·	management of risk. With regard to analysis of risk, there are a range of tools being developed. For instance, ClimateWise has published physical and transition risk frameworks for (re)insurers. Furthermore, the Bank of England has recently released a framework for assessing the financial impacts of physical risk. With regard to management of risk, we consider that exclusion policies, inclusion policies and stewardship strategies should all play a role. NA Insurers' approach to investing is not different for sustainability risks com-pared to any other risks. Insurers have a duty of diligence and care for their policyholders, and this duty applies to all types of assets they invest in. Already now it is the task within the prudent person principle to address sustainability risks in the assessment of investments, if they are financially relevant. The consideration of sustainability factors could be part of a general risk/return assessment of assets. n/a n/a Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us. Insurers' approach to investing is not different for sustainability risks compared to any other risks. Insurers have a duty of diligence and care for their policyholders, and this duty applied to all types of assets they invest in. Already now it is the task within the prudent person principle to address sustainability risks in the assessment of investments, if they are financially applied to all types of assets they invest in. Already now it is the task within the prudent person principle to address sustainability risks in the assessment of investments, if they are financially relevant. The consideration of sustainability factors should be part of a general risk/return assessment of assets. No response



i		
EIOPA insurance and re- insurance stakeholder group	Insurers have a duty of diligence and care for their policyholders. The prudent person principle requires addressing sustainability risks in the assessment of investments, if they are financially relevant. We believe that the consideration of sustainability factors should be part of a general risk/return assessment of investments. This considered, key risk management strategies to deal with risks include diversification and a global investment strategy. Also, the inclusion/exclusion of policies, good practice in dealing with transition and physical risk and stewardship strategies should all play a role here. In addition to this, engagement practices are more suitable for risk mitigation and allow for a good knowledge of investees. With regard to analysis of risk and good practices we find several tools available: •ClimateWise has published physical and transition risk frameworks for (re)insurers •The Bank of England has recently released a framework for assessing the financial impacts of physical risk. •Begular meetings with executive management to discuss future risks, including climate change. •Work with scenarios and evaluate impact. •Measure carbon asset risks and alignment to decarbonization strategies across all investments. •Conduct physical risk analysis of assets and debt, including risks of loss of resources. •Assess regulatory risks. •Help portfolio managers make better informed decisions by providing them with data and tools to integrate climate issues. •Many European insurance companies support the quest for better climate disclosure by signing CDP's investor request.	Noted.
Finance Watch	ESG investing is often either considered to increase exposure to risk due to nature of the investments, or seen as a form of risk management and so leads to lower returns. Insurers are, however, uniquely placed to potentially consider taking a shared value business model perspective. See FSG, 'How Insurers Gain Competitive Advantage by Better Addressing Society's Needs', June 2017. As well as targeting investment opportunities to reduce protection gaps or target prevention, insurers can also avoid investments that are counter-productive. Insurers could put this into practice taking a stewardship role and pushing for better data availability on assets to help improve the reflection of sustainability risks in their valuation. It would help potentially move more insurers from being reactive to proactive in the face of developments linked to sustainability risks.	Noted.

As stated before, insurers have a duty of dilgence and care for their policyholders. It is their task within the prudent person principle to address sustainability risks in the assessment of investments, as long as they are financially relevant for the undertaking. The consideration of assessment person of the semination of assessment and the assessment of assess. To a certain extent, also the ORSA could be used to examine these risks, provided each insurer is given fixed and induced and how to or so. Noted. Insurance Europe The considered, diversification is a key risk management strategy to deal with any kind of risk. A induced and insure is goverein bonds or real estate, may require a more in-depth risk analysis. A global investment strategy is the best and most efficient way to support the sustainability traks and factors in Solvency II and IDD, the consideration and related investment strategy is the best and most efficient way to sustainability rates and factors in Solvency II Directive). Also, it has to be ensured that such consideration and related investment (Art. 133 of the Solvency II Directive). Also, it has to be ensured that such consideration and related investment strategy is the best and most efficient way to sustainability rates and factors in Solvency II Directive). Also, it has to be ensured that such consideration and related investments. If the consideration on tasks of the principle of read on solvence and related investments in the sustainability relevant. The consideration of assessment of assess. As stated before, insurers have a duty of dilignee and care for their policyholders. It is the task within the prudent person principle to address sustainability factors could be part of a sensement of assess. It is the task within the prudent person principle to address sustainabilis factors could be part of a sensement of assets.	within the prudent person principle to address sustainability risks in the assessment of investments, as long as they are financially relevant for the undertaking. The consideration of sustainability factors could be part of a general risk/return assessment of assets. To a certain extent, also the ORSA could be used to examine these risks, provided each insurer is given flexibility on whether and how to do so. This considered, diversification is a key risk management strategy to deal with any kind of risk. A	
within the prudent person principle to address sustainability risks in the assessment of investments, if they are financially relevant. The consideration of sustainability factors could be part of a general risk/return assessment of assets.This considered, a key risk management strategy to deal with any kind of risk is diversification. A well-diversified portfolio with different kinds of assets in terms of geography, sector and other considerations will have, on average, a lower risk than concentrated portfolios. Any part of the portfolio that has a higher degree of concentration, e.g. sovereign bonds or real estate, may require a more in-depth risk analysis.Noted.AssuraliaThe insurance sector also highlights that labels are an easy to communicate way to invest in green or sustainability ransition and deal with climate-related risks.Noted.Finally, as already highlighted in occasion of the consultation on EIOPA's technical advice on the integration of sustainability risks and factors in Solvency II and IDD, the consideration of sustainability factors must not result in a contradiction or limitation of the principle of freedom of investment (Art. 133 of the Solvency II Directive). Also, it has to be ensured that such consideration and related investment best practices do not contradict the requirement to act in the best interest of existing stakeholders of the company, including its policyholders.	Insurance Europeconsiderations will, on average, have a lower risk than concentrated portfolios. Any part of the portfolio that has a higher degree of concentration, eg sovereign bonds or real estate, may require a more in-depth risk analysis. A global investment strategy is the best and most efficient way to support the sustainability transition and deal with climate-related risks.Noted.Finally, as already highlighted in occasion of the consultation on EIOPA's technical advice on the integration of sustainability risks and factors in Solvency II and IDD, the consideration of sustainability factors must not result in a contradiction or limitation of the principle of freedom of investment (Art. 133 of the Solvency II Directive). Also, it has to be ensured that such consideration and related investment best practices do not contradict the requirement to act in the best interestNoted.	urance Europe
	within the prudent person principle to address sustainability risks in the assessment of investments, if they are financially relevant. The consideration of sustainability factors could be part of a general risk/return assessment of assets. This considered, a key risk management strategy to deal with any kind of risk is diversification. A well-diversified portfolio with different kinds of assets in terms of geography, sector and other considerations will have, on average, a lower risk than concentrated portfolios. Any part of the portfolio that has a higher degree of concentration, e.g. sovereign bonds or real estate, may require a more in-depth risk analysis. Assuralia The insurance sector also highlights that labels are an easy to communicate way to invest in green or sustainable assets, but a global investment strategy is more efficient to support the sustainability transition and deal with climate-related risks. Finally, as already highlighted in occasion of the consultation on EIOPA's technical advice on the integration of sustainability risks and factors in Solvency II and IDD, the consideration of sustainability factors must not result in a contradiction or limitation of the principle of freedom of investment (Art. 133 of the Solvency II Directive). Also, it has to be ensured that such consideration and related investment best practices do not contradict the requirement to act in the best interest	


AMICE	Please note that the transition risk mentioned only considers one transition (from carbon energy sources to renewables) and yet is one of many possible future transitions. The industry had already experienced various technological transitions in the past (from analogue to digital photography; from landline telephones to mobile and smart phones; medical transitions like no cure for infectious diseases to vaccination, anti-biotic medicine and immune enforcing treatments increasing life expectancy). In the near future some other transitions are expected such as transport moving to autonomous ability, using artificial intelligence and robots. Usually, the faster the transition the greater the risk. Slow transitions are translated into trends (like longevity). Ultra-fast transitions could be regarded as disruptive events (almost catastrophe events). From a transitional perspective, such a trend is a catastrophe in slow-motion. These risks could be examined in subsequent ORSAs. It concerns emerging risks so there is no need to examine them all at once. The ORSA is the right place to examine these transitions in scenarios, including possible countering management actions and future loss absorbing capacity (by capital accumulation through capital generation). For disruptive events, the ORSA is also the right instrument to assess the real vulnerabilities. If the aim is to encourage sustainable investments then returns and sustainability considerations will be less taken into account. Or, alternatively, the insurance sector must consider the recent amendment of the Capital Requirement Regulation (Article 501). Based on this, the EBA shall assess on the basis of available data and the findings of the High Level Expert Group on Sustainable Finance of the EC, whether a dedicated prudential treatment of assets exposed to activities associated substantially with environmental and /or social objectives, in the form of different capital charges, would be justified from a prudential perspective.	Noted.
GLOBAL WARNING	The use of green and climate "good" labels is of huge importance. See for instance the IN GLOBO project regarding the way to "shift the trillions" of individual savings, with life insurance products, relying on labelled UCITS (ISR and Greenfin French labels) : Regarding IN GLOBO V0 project : https://theshiftproject.org/article/assurance-vie-transition-soutient-lamendement-loi-pacte/ IN GLOBO executive summary : https://theshiftproject.org/wp-content/uploads/2019/01/ASSURANCE-VIE- INDIVIDUELLE_CONTRAT-IN-GLOBO_v7.pdf A forum in Le Monde (31/01/19) https://www.lemonde.fr/idees/article/2019/01/30/grand-debat-reorienter-l-epargne-vers-l- investissement-reellement-ecologique-et-socialement-responsable_5416368_3232.html	Noted.

Question 21: Do you consider "impact underwriting" as described in the opinion to be a relevant way to take into account sustainability in underwriting policy?

Name of the organisation	Question	Please elaborate.	Res
SD-M GmbH	Yes	No comment.	Note
ClientEarth	Yes	Yes, we consider that "impact underwriting" is a way to incorporate sustainability into underwriting policy. From a climate change perspective, this may assist in both mitigating and adapting to climate change. This has benefits not just for society, but also for insurers by keeping markets commercially insurable. Nevertheless, it is important to remember that all underwriting has real-world impact (whether it is labelled as "impact underwriting" or not). Understanding and shaping that impact is a key risk management tool for insurers. It is therefore not enough to simply look at developing products which have a positive impact on ESG issues. It is equally important to recognise when products have negative consequences and question whether they are compatible with (re)insurers' own long-term interests.	Note term deve but s inter relat
Financial Guard Ltd	No	NA	Note
German Insurance Association	n/a	Before we address the question of the "impact underwriting" it is at first necessary to larify what "underwriting" (UW) in the insurance industry really means: UW is the risk-based assessment and risk-based pricing of a legal (e.g. third party liability) or actual (e.g. property insurance) risk that the insurer is asked to cover. Any aspects besides these risk-based factors must not play any role in insurance UW. Otherwise, the necessary balance between risk-based premium income and claims payments as a foundation for financial market stability would be severely leopardized. Example: For the risk-based assessment and calculation of the fire risk in a warehouse, factors such as fire protection segments throughout the building, sprinkler systems or combustibility of the stored goods play a role. In contrast, the assessment of whether the goods were produced by child labour or the owner of the warehouse causes disproportionate CO2 emissions is not part of risk-based underwriting. Therefore, all questions that do not concern the immediate core of risk transfer need to be clarified in a process that takes place immediately before or after the actual UW. These include questions of sustainability (rSG), the company's reputation or the business policy of an insurer in the insurance market	Part und sust For sust the horiz capt

loted. loted. The opinion pointed out some current practices of insurers in erms of "impact underwriting" and not all of them consist in

erms of impact underwriting and not all of them consist in evelopping products which have a positive impact on ESG issues ut some of them aim at taking into account (re)insurers' long-term iterests (developping guidelines as to the underwriting of climateelated risks, for instance).

oted.

- artially agreed. EIOPA considers it is prudentially relevant to require ndertakings to take into acccount the impact of their underwriting on ustainability factors.
- or instance in housing insurance, where taking into account ustainability risks can contribute to prevent risky behaviours. his should be consistent with sound actuarial practice. Furthermore, ne current risk-based assessment is usually done on a one-year orizon timeframe using historical data, which is insufficient to
- apture all relevant sustainability risks.

Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	No	EIOPA's conclusion that the majority of undertakings currently do not explicitly take sustainability risks into account in their underwriting policies might be misleading in our view. First, the risk- based assessment and risk-based pricing already captures several ESG risks, for instance the transition risk of fossil energy sources. Second, undertakings implicitly subsume a number of sustainability risks in the category of reputational risks. The V0V therefore concludes that market driven factors have already led to an extensive inclusion of sustainability risks into the underwriting policies. This development will continue at an even higher pace in the future and mandatory requirements will not be necessary to reinforce it. The VöV supports the initiative to develop voluntary and market driven approaches to incorporate ESG criteria into the business models of insurers. While the role of sustainability in investmen has grown considerably in the insurance sector in the past years, its role in underwriting is still in its inflancy for many insurers, in particular small and medium ones. Guidance on a holistic treatment of ESG risks is therefore very welcome, whereas mandatory and inflexible rules would potentially exclude entire sectors from insurance coverage, with substantial negative effects on jobs, regions and growth. In particular, the VöV supports an open approach that allows for sufficient flexibility in strengthening ESG considerations in the underwriting process on a voluntary basis. This openness is essential to help insurers of all sizes to succeed in this endeavour. Rigid rules would be a significant burden for smaller companies and proportionality will be a key factor for the progress of the initiative. The VöV advocates an approach that considers all risk appropriately in two separate steps. Whereas financial risks are decisive in the underwriting process, ESG risks are relevant for an ESG assessment. To ensure a proper treatment of these different risks, we suggest not merging the two different pr	nt Pa i Su Th
FERMA - Federation of European Risk Management Associations	No	FERMA believes that within the concept of "impact underwriting", it is important to consider the underwriting concentration of captive (re)insurance companies, i.e. the fact that their strategic objective is to (re)insure only risks arising from their group's activities. As such, they heavily rely on the sustainability profile of their group's activities and should not be negatively impacted beyond the requirement of additional capital, if and where required. To enforce the proportionality principle, specific provisions should be applied for the underwriting policy, including the possibility for an exemption from new sustainability rules.	No
German Association of Private	n/a	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	No
Health Insurers (PKV) Allianz SE	n/a	Our understanding of sustainability in underwriting is about the identification and management of ESG risks directly relevant and/or linked to the profitability of the insurance portfolio. Impact underwriting has a different objective: aiming to achieve social, environmental and finally political goals. These goals are not necessarily always in alignment with insurance principles and mechanisms, and thus could potentially undermine the idea of risk identification, mitigation and pricing.	Pa un su pra
Investment & Life Assurance Group	n/a	N/A	No
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a	-	No
Actuarial Association of Europe	Yes	Impact underwriting is defined as "explicitly considering risk mitigation and adaption strategies in product design (e.g. terms and conditions for underwriting to support environmental goals), eventually lowering the costs for (re)insurance for climate-related risks". Impact underwriting is likely to be a relevant way to take sustainability into account in underwriting policy. As a concept, we do not consider it yet to be clearly defined or established. For impact underwriting to succeed it would need to be universally adopted by insurers or to be imposed on insurers. Even if it were universally adopted by insurers, it could still be undermined by alternative products from capital markets which were not required to apply an impact approach. Impact underwriting could potentially lead to a number of benefits for the industry and the consumer of insurance in terms of availability of insurance and better risk management by undertakings and customers.	N
European Savings and Retail Banking Group	n/a	-	No
. <u> </u>	•		

Partially agreed. EIOPA considers it is prudentially relevant to require undertakings to take into acccount the impact of their underwriting on sustainability factors.

his should be consistent with sound actuarial practice.

loted. Proportionality is explicitly referred to.

Noted. Partially agreed. EIOPA considers it is prudentially relevant to require undertakings to take into acccount the impact of their underwriting on sustainability factors. This should be consistent with sound actuarial bractice.

loted.

loted.

loted. Further clarifications have been made.

loted.

			_
EIOPA insurance and re- insurance stakeholder group	Yes	We appreciate EIOPA explanation of "impact underwriting" and we invite EIOPA to describe further this concept, highlighting more precisely what is meant with it and how this would be beneficial in a Solvency II context. This said, we see that "Impact underwriting" could be relevant in cases where risk mitigation and loss prevention could make a significant difference. In this respect, a distinction should be made between retail clients and companies / local authorities. Insurers have limited leverage with individual customers as in this case the prevention is mostly individual. In the case of companies and local authorities, insurers might have more impact as they implement risk mitigation and adaptation strategies. Therefore "impact underwriting" is more relevant in this case. Regarding natural catastrophes, prevention should be collective and be implemented by local authorities. We also consider that from a climate change perspective, this may assist in both mitigating and adapting to climate change. This has benefits for society, but also insurers by keeping markets commercially insurable. To enforce the proportionality principle, specific provisions should be applied for the underwriting for captive (re)insurance companies, i.e. the fact that their strategic objective is to (re)insure only risks arising from their group's activities. As such, they heavily rely on the sustainability profile of their group's activities and should not get additional capital requirements	sho
Finance Watch	Yes	An understanding of impact underwriting that ensures both products with a positive ESG impact are created, as underlined in 8.38, should also be complemented with identifying where products have a negative ESG impact to then be able to take action accordingly.	Not
Insurance Europe	Yes	The insurance industry appreciates the fact that EIOPA recognises the importance of risk mitigation and adaptation strategies, which have always been key for the insurance sector and which European regulators have worked on for a number of years. In this respect, the sector encourages EIOPA to further clarify the definition of "impact" underwriting and its scope, especially in the context of Solvency II. It needs to be clarified that "impact underwriting" should only take into account to considerations which are based on or related to risk, as part of the underwriting process The industry believes that "impact underwriting" could be particularly relevant in cases where risk mitigation and loss prevention could make a significant difference. In this respect, a distinction should be made between: - Retail clients — In this case, insurers have limited leverage. For non-life insurance, insurers can include risk mitigation and prevention strategies in the product design for damages such as fire or theft. In those cases, the prevention is individual Companies / local authorities — In this case, insurers might have more impact. Companies and local authorities' can implement risk mitigation and adaptation strategies at their level. Thus, the "impact underwriting" is more relevant. A collaboration between insurers, companies and local authorities could raise awareness of risks and standardise risk categories. The effect will be twofold: the policyholder will try to prevent risks and the insurer will be able to segregate the different risks. Focusing on natural catastrophes, the sector notes that prevention should be collective and be implemented by local authorities as well as companies, eg due to legal obligations. Collaboration with local authorities and companies helps to improve data quality and even create new databases on the vulnerability to climate change, eg on the resilience of housing regarding the construction material, structural integrity, etc.	.□ Agr con con unc
Assuralia	Yes	"Impact underwriting" could be relevant in cases where risk mitigation and loss prevention could make a significant difference. In this respect, a distinction should be made between:□ retail clients. In this case, insurers have limited leverage. For non-life insurance, insurers can include risk mitigation and prevention strategies in the product design for damages such as fire or theft. In those cases, the prevention is individual. Companies / local authorities. In this case, insurers might have more impact. Companies and local authorities' can implement risk mitigation and adaptation strategies at their level. Thus, the "impact underwriting" is more relevant. A collaboration between insurers, companies and local authorities could raise awareness of risks and standardise risk categories. The effect will be twofold: the policyholder will try to prevent risks and the insurer will be able to segregate the different risks. Regarding natural catastrophes, the sector notes that the prevention should be collective and be implemented by local authorities. Collaboration with local authorities and companies allows to improve data quality and even create new databases on the vulnerability to climate change, e.g. on the resilience of housing regarding the construction material, structural integrity, etc. E.g. currently in Belgium, the premium of fire insurance is, among others, dependent on flood risk, which is modelled based on flood maps. In case of a sale or rent, it is legally required to hand over a local flood map to potential buyers or renters, indicating the flood risk of the property. This makes sure that people are aware of the flood risk and are prepared to either invest in preventive measures or pay more premium. In collaboration with local authorities and companies, new data and categories could be set up on the resilience of housing to climate change impact, e.g. the kind of roof material (hail & windstorm), structural integrity and flexibility (windstorm & earthquakes).	Agr con con unc
Caisse des Depôts Group	n/a	No views	Not
AMICE	Yes	Impact underwriting as mentioned by EIOPA should be part of the normal underwriting cycle and should be analysed by the actuarial function holder. Any emerging risk should be considered, not only assessing the impact on the capital requirements, but also how the terms and conditions of the insurance products deal with these emerging risks.	Not
GLOBAL WARNING	Yes	N/A	Not

loted. Further clarifications have been made."impact underwriting" hould be consistent with sound actuarial practice.

loted.

Agreed. EIOPA agrees with the distinction between retail clients and companies/local authorities and the need for collaboration with companies and local authorities (included in the opinion). Impact inderwriting should be consistent with sound actuarial practices.

Agreed. EIOPA agrees with the distinction between retail clients and companies/local authorities and the need for collaboration with companies and local authorities (included in the opinion). Impact inderwriting should be consistent with sound actuarial practices.

loted. loted.

Name of the organisation	Question 2	Please elaborate.	Response from EIOPA
SD-M GmbH	Yes	No comment.	Noted.
ClientEarth	n/a	-	Noted.
Financial Guard Ltd	No	NA	Noted.
German Insurance Association	n/a	We would like to point out the importance of "prevention measures" as factors of climate change adaptation, risk management and premium assessment. Prevention is the key factor in order to keep losses low and premiums affordable in the future (-> closing the protection gap). Financial market instruments alone will not suffice to cope with the problem. The topic of prevention relates both to preventive measures by the public sector (e. g. dikes, dams, retention areas for flood protection) and preventive measures by homeowners (e. g. flood-adapted and heavily rain-adapted construction). The key to sustainable, stable underwriting lies in the close interaction of risk transfer through the protection by insurance and sustainable risk reduction through prevention. In this respect, the ex-isting protection gap in Germany is caused more by a lack of risk awareness among the population and the lack of sustainable and climate-friendly building regulations, than by an insufficient supply of insurance. Effective prevention measures reduce the individual risk and thus the amount of risk-based premium in underwriting. A protection gap is created where necessary and effective preventive measures in Germany neither want to invest in prevention nor pay "high insurance premiums". By putting a risk-based premium on the table, the insurer is merely the "bearer of bad news". However, the cause of the protection gap in Germany is usually the policyholder's failure to act.□	Noted.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	Yes	The VöV sees prevention of sustainability risks as crucial factor. That comprises both preventive measures by the public sector (dikes, dams, retention areas for flood protection) and preventive measures by homeowners (e.g. flood-adapted and heavily rain-adapted construction). The key to sustainable, stable underwriting lies in the close interaction of risk transfer through the protection by insurance and sustainable risk reduction through prevention. German public insurers are very active in preventive measures, as pointed out in the answer to the next question. The existing protection gap in Germany is caused more by a lack of risk awareness among the population and the lack of sustainable and climate-friendly building regulations, than by an insufficient supply of insurance.	Noted.
FERMA - Federation of European Risk Management Associations	n/a	n/a	Noted.
German Association of Private Health Insurers (PKV)	n/a	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.



	ethical/reputational rather than underwriting and profitability considerations. Insurers by their nature cover for financial losses of their clients. Underwriting by itself cannot mitigate a risk, it can only price a risk (technical and market price). Insurers are only indirectly involved; risk creation and mitigation happens at our clients operations. Desirable technologies that serve climate risk mitigation or adaptation towards a low-carbon economy are not necessarily within an insurer's risk appetite or profitable from a risk/ return perspective. However, insurers involve themselves in new markets e.g. supporting new technologies with only limited historical data. In these cases, insurers take the risk of inaccurate pricing whilst helping the industry in risk mitigation and adaption. Our product terms and conditions are frequently reviewed and adjustments can be made at short term, should historic experience or trend analysis suggest so. Our R&D teams closely monitor the developments regarding climate change and play an advisory role in our product strategy. In that respect the R&D team does detailed testing of available Cat models to make sure any trend is	Noted.
n/a	Ν/Α	Noted.
ı/α		
n/a	-	Noted.
	As an actuarial association, we do not underwrite insurance products. We do not expect many completely new products resulting from climate change. We expect climate change to influence many insurance products in the long run especially in the area of property insurance. Clearly, we expect that climate change will impact weather and elementary risk related risks (NatCat). Climate change will influence both the frequency and severity of claims. As part of companies' business-as-usual practice, such changes are already monitored routinely and reflected in premium rates and policy terms and conditions.	Noted.
		Noted.
ר	'es /a /a	and strategic engagement in a market or industry. Engagement with clients or exclusion of certain economic activities from our portfolio from a sustainability perspective are driven by moral/ ethical/reputational rather than underwriting and profitability considerations. Insurers by their nature cover for financial losses of their clients. Underwriting by itself cannot mitigate a risk, it can only price a risk (technical and market price). Insurers are only indirectly involved; risk creation and mitigation happens at our clients operations. Desirable technologies that serve climate risk mitigation or adaptation towards a low-carbon economy are not necessarily within an insurer's risk appetite or profitable from a risk/ return perspective. However, insurers involve themselves in new markets e.g. supporting new technologies with only limited historical data. In these cases, insurers take the risk of inaccurate pricing whilst helping the industry in risk mitigation and adaption. Our product terms and conditions are frequently reviewed and adjustments can be made at short term, should historic experience or trend analysis suggest so. Our R&D teams closely monitor the developments regarding climate change and play an advisory role in our product strategy. In that respect the R&D team does detailed testing of available Cat models to make sure any trend is properly reflected. Where needed, external models are adapted or internal models developed. /a N/A /a - /a As an actuarial association, we do not underwrite insurance products. We do not expect many completely new products resulting from climate change. We expect climate change to influence many insurance products in the long run especially in the area of pr



EIOPA insurance and re- insurance mechanisms. Climate risk mitigation and adaptation strategies is usually company specific. A generalization of such practices should be carefully evaluated to avoid conflicts with general insurance mechanisms. EIOPA insurance mitigation and adaptation strategies are generally considered as part of a company's overall risk apnetite and strategic engagement in a market to industry. Engagement with clients or exclusion of certain economic achivities from portfolios from a sustainability perspective might be driven by other than underwriting and profitability considerations. By their nature, insurers cover for financial losses of their clients. Underwriting by itself cannot mitigate a risk, it can only price a risk (ichnical and market prico). Insurers only indirectly involved; risk creation and mitigation or adoptation from a sust anability from a sustainability to economy are not necessarily within an insurer's risk appetite or profilability for a sub-carbon economy are not necessarily within an insurer's risk appetite or profilability from a low-carbon eoconomy are not necessarily within an insurer's risk appetite or profilability from a low-carbon eoconomy are not necessarily within an insurer's risk appetite or profilability from six (return perspective. However, insurers can be involved in new markets e.g. new technologies with only limited historical data. In these cases, insurers take the risk of inaccurate pricing whilst heiping the industry in risk mitigation and adaption. Noted. We find that frequently reviewing the product strategic can also be adapted, or internal models developments regarding climate change and then be given an advisory role in the product strategy. In that respect the R&D team would do detailed testing of available Cat models to make sure any trend is propeny reflected. Where needed, external models can also be adapted			-	
Finance Watchn/a-Noted.Insurance Europen/a-Noted.Assuralian/a/Noted.Caisse des Depôts Groupn/aNo viewsNoted.AMICEn/aN/ANoted.			A generalization of such practices should be carefully evaluated to avoid conflicts with general insurance mechanisms. Climate risk mitigation and adaptation strategies are generally considered as part of a company's overall risk appetite and strategic engagement in a market or industry. Engagement with clients or exclusion of certain economic activities from portfolios from a sustainability perspective might be driven by other than underwriting and profitability considerations. By their nature, insurers cover for financial losses of their clients. Underwriting by itself cannot mitigate a risk, it can only price a risk (technical and market price). Insurers are only indirectly involved; risk creation and mitigation happen at clients' operations. □ Desirable technologies that serve climate risk mitigation or adaptation towards a low-carbon economy are not necessarily within an insurer's risk appetite or profitable from a risk/ return perspective. However, insurers can be involved in new markets e.g. new technologies with only limited historical data. In these cases, insurers take the risk of inaccurate pricing whilst helping the industry in risk mitigation and adaption. We find that frequently reviewing the product terms and conditions, and adjusting if necessary, is one good practice of what can be done in the short term in the case historic experience or trend analysis suggest so. For instance, R&D teams can be used to monitor the developments regarding climate change and then be given an advisory role in the product strategy. In that respect the R&D team would do detailed testing of available Cat models to make sure any trend is properly reflected. Where needed, external models can also be adapted, or internal models developed. Some insurance companies also mention that innovative work is ongoing to meet customers' demand for products that respond to the new needs caused by the transition to a low carbon economy. However, there is little guidance in the data on how this is done. Some have also included	Noted.
Insurance Europen/a-Noted.Assuralian/a/Noted.Caisse des Depôts Groupn/aNo viewsNoted.AMICEn/aN/ANoted.	Einenee Watch			Notod
Assuralian/a/Noted.Caisse des Depôts Groupn/aNo viewsNoted.AMICEn/aN/ANoted.				
Caisse des Depôts Group n/a No views Noted. AMICE n/a N/A Noted.	· · · ·			
AMICE n/a N/A Noted.				
	· · · ·			
IGLOBAL WARNING In/a IN/A Noted.				
	GLOBAL WARNING	n/a	N/A	Noted.

Name of the organisation	(b) What would be the main benefits/obstacles of the generalisation of such a practice?	Response from EIOPA
SD-M GmbH	No comment.	Noted.
ClientEarth	-	Noted.
Financial Guard Ltd	NA	Noted.
German Insurance Association	n/a	Noted.
Association of German Public		
Insurers - Verband öffentlicher		Noted.
Versicherer (VöV)	n/a	
FERMA - Federation of		
European Risk Management		Noted.
Associations	n/a	
German Association of Private	Regarding this question we would like to refer to the statement filed by the German Insurance	Natad
Health Insurers (PKV)	Association (GDV) which is supported by us.	Noted.
Allianz SE	No comment.	Noted.
Investment & Life Assurance		Natad
Group	No response	Noted.

(b) What would be the main benefits/obstacles of the generalisation of such a practice?



Vienna Insurance Group AG		Noted.
Wiener Versicherung Gruppe	-	
	A key challenge would be to ensure we have a very clear definition of what exactly is meant by Impact Underwriting if it is to be universally adopted. If universally adopted, and with protections to ensure it was not undermined by non-insurance alternatives, Impact Underwriting could help reduce the impact of climate change. This could in turn help limit the growth of uninsurable risks.	Agreed.
Actuarial Association of Europe		
European Savings and Retail		Noted.
Banking Group	-	Noted.
EIOPA insurance and re-		Neted
insurance stakeholder group	-	Noted.
Finance Watch	-	Noted.
Insurance Europe	-	Noted.
Assuralia	/	Noted.
Caisse des Depôts Group	No views	Noted.
AMICE	A benefit of combining adaptation strategies with products can be the risk reduction effect. Combining risk mitigation with products can be done from a social corporate responsibility perspective, but can lead to adverse selection and therefore to an increased risk profile.	Noted. Impact underwriting should be cons sound actuarial practice.
GLOBAL WARNING	N/A	Noted.



Question 23: Do you identify other good practices than those described above?

Name of the organisation	Question	Please describe.	Response from EIOPA
SD-M GmbH	No	No comment.	Noted.
ClientEarth	Yes	We consider that in order to manage sustainability risks such as climate change, insurers must adapt their underwriting practices. In part, this may mean reflecting ESG risks in pricing. However, this practice may ultimately just lead to insurers being priced out of the market. It is therefore not a sustainable long-term strategy on its own. To be sustainable, underwriting must include further considerations. Chiefly, underwriters must recognise that underwriting policy shapes real-world behaviour. This should be leveraged as part of insurers' risk management system to protect against mid to long-term risks such as climate change.	
Financial Guard Ltd	No	NA	Noted.
German Insurance Association	Yes	In order to create an understanding among the people for sustainable insurance business and the implementation of necessary preventive measures, there should be an Internet-based natural hazards portal. Similar in attendance and handling to Google Maps ™, this system should contain hazard and risk maps for all relevant natural hazards (for example flood, heavy rainfall, landslide hazard, avalanche hazard). Corresponding datasets are most likely available in the EU member states. Austria already has a portal in operation called "HORA" that fulfils the basic requirements of such a natural hazards portal in many areas. Conclusion: Only, if existing perils are made public and explained in a way that is easy to understand, will sustainable adaptation measures come to existence.	Agreed. The opinion aims at encouraging c with public authorities, including on datasets
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	Yes	German public insurers are highly committed to their regions and take responsibility for the people who live there. They actively work to improve public safety, for instance by outfitting fire brigades with technical equipment or participating in fire safety education in kindergartens and schools. They also regularly work together as a group for the common good, for instance in the development of innovative loss prevention techniques such as disaster warning systems for the general public.	Noted.
FERMA - Federation of European Risk Management Associations	n/a	n/a	Noted.
German Association of Private Health Insurers (PKV)	n/a	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	Yes	Through strategic commitment to respective economic activities.	Noted.
Investment & Life Assurance Group	n/a	N/A	Noted.
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a	-	Noted.
Actuarial Association of Europe	n/a	No answer	Noted.
European Savings and Retail Banking Group	n/a	-	Noted.
EIOPA insurance and re- insurance stakeholder group	Yes	 We consider that in order to manage sustainability risks such as climate change, insurers must adapt their underwriting practices. In part, this may mean reflecting ESG risks in pricing. However, this practice may ultimately just lead to insurers being priced out of the market. It is therefore not a sustainable long-term strategy on its own. To be sustainable, underwriting must include further considerations. Chiefly, underwriters must recognise that underwriting policy shapes real-world behaviour. This might need to be leveraged as part of insurers' risk management system to protect against mid to long-term risks such as climate change. Also strategic commitment to relevant economic activities is highly important, which can be for instance involvement in research programmes and education of clients in sustainable investments/ pension/insurance. 	Agreed. The idea of prevention measures to clients (for instance via education programmentionned in the opinion.
Finance Watch	n/a	<u> </u>	Noted.
Insurance Europe	n/a	<u>+</u>	Noted.
Assuralia	n/a	/	Noted.

ng cooperation
asets.
res towards
rammes) is
a

Caisse des Depôts Group	n/a	No views	Noted.
AMICE	n/a	No we do not	Noted.
GLOBAL WARNING	n/a	N/A	Noted.

Question 24: What are your views on climate change potentially widening the protection gap for natural catastrophe (re)insurance?

Name of the organisation	Question 24: What are your views on climate change potentially widening the protection gap for natural catastrophe (re)insurance?	Response from EIOPA
SD-M GmbH	No comment.	Noted.
ClientEarth	According to the Geneva Association, the protection gap is one of the most pressing issues facing societies. Furthermore, it is anticipated to grow as a result of climate change. This is not only detrimental to society, but also to insurers as insurable markets shrink. In our view, the only way to prevent this is through i) climate change mitigation, and ii) climate change adaptation. Underwriting and investment policy must be deployed to support both of these objectives.	Agreed. In the Opinion EIOPA acknowledges the role for underwriting practices.
Financial Guard Ltd	NA	Noted.
German Insurance Association	See above. The current protection gap in Germany is not due to the fact that there is no offer of affordable insurance protection on the market. The long-standing intervention of the government on loss events through the payment of compensation from "taxpayers money" has led many home-owners believe, that having no natural hazards insurance is worth the risk. Only in the last two years there has been a change of mind in German politics. In our view, a close cooperation between government agencies and the insurance industry is required in the future in order to make risks transparent and to convince the owners of previously uninsured properties to close their protection gap with prevention measures and natural hazards insurance. However, the protection gap could increase in the long term if the global community fails to effectively limit greenhouse gas emissions in the sense of the Paris Climate Agreement. In a + 4 ° C world, even the best prevention measures reach their limits. In addition, in the case of the protection gap, it is generally assumed that all natural hazards are insured compre-hensively and "from the first Euro onwards". In the course of product de-velopment and underwriting however, insurance offers a wide range of options for providing insurance products, making risk insurable and reduc-ing risk (for example layer coverages, integral franchises, bonus-malus systems, etc.).	Agreed.In the revised version of the Opinion the engagement with public authorities (i.e. government) is covered.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	Making risks more transparent and creating awareness of owners of previously uninsured properties are essential to limit a potential protection gap. See also the previous answer.	Agreed. The role for insurers as risk consultants is highlighted.
FERMA - Federation of European Risk Management Associations	n/a	Noted.
German Association of Private Health Insurers (PKV)	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	Climate change is expected to increase the protection gap. For Europe this trend might not be too concerning in the near term future (e.g. next 10 years). The consequences of improved risk assessment techniques, tools and data and higher resolutions might have a stronger impact on the short term protection gap than climate change by itself. Climate change may lead to increased demand for insurance against weather related damage. We do not see reasons for these events in most cases not being insurable as such, as advanced analytical methodologies provide ever better foundations for sound weather related insurance product developments. However, where the protection gap is mainly caused by economic mismatches in high risk areas, which for these region do not allow a self-financing insurance offering, climate change may lead to a further widening of this economic gap over time.	Noted. Your comment on the protection gap is taken into account. In the Opinion now a box on the protection gap, including your views, is added.
Investment & Life Assurance Group	No response	Noted.
Vienna Insurance Group AG Wiener Versicherung Gruppe		Noted.



Actuarial Association of Europe	Climate Change is expected to influence the frequency and severity of natural catastrophes. This influence can, on the one hand, lead to an increased risk in certain regions and, on the other hand, reduce the frequency and severity of natural catastrophes in other regions. The development of a protection gap depends on a complex dynamic including the interplay of the public and private sectors at national, regional and global levels. Climate change discourse may raise awareness and contribute to narrowing the protection gap. Conversely, the inherent uncertainty may lead to less affordable premiums widening the protection gap. Climate change will inevitably increase the number of uninsurable risks. In the absence of national or supranational governmental regulatory intervention, insurers will withdraw from some areas of the market, or sharply increase premium levels in order to manage their own risk profiles. In this case, we expect a widening of the existing protection gap for natural catastrophes.	Noted.
European Savings and Retail Banking Group		Noted.
EIOPA insurance and re- insurance stakeholder group	While climate change is expected to increase the protection gap, the industry should be able to	Noted. Your comment on the protection gap is taken into account. In the Opinion now a box on the protection gap, including your views, is added.
Finance Watch	As outlined in the opinion there are serious issues related to financial stability and potential concentrations of risk arising from natural catastrophe (re)insurance. Potential issues arising from the impacts of climate change may not only increase the protection gap, but also increase financial stability risks. In cases of public – private reinsurance pools for natural catastrophes, the potential consequences of risk transfer to states should be carefully considered. As mentioned in previous responses exploring a shared value business model could allow insurers to help reduce the protection gap, including through mitigation and adaptation.	Agreed. In the Opinion EIOPA acknowledges the rol for underwriting practices in adapting to and mitigating climate related risks.



Insurance Europe	It may happen in some markets and extreme cases due to higher frequency and cost of claims, but the private industry is expected to be able to deal with these issues in most cases. The main problem will not be that some risks will no longer be insurable, but that households and businesses may no longer be able to stay in their current location and may have to relocate. A number of insurers cooperate with local governments in public-private sector partnerships to share their expertise in risk awareness and management, eg to provide affordable insurance and high penetration rates. Flood risk in some countries represents a good example.	Noted. Your argument on relocation is taken into account in the added Box on the protection gap.
Assuralia	It may happen in some markets and extreme cases due to higher frequency and cost of claims, but we believe that the private industry should be able to deal with these issues. The main problem will not be that some risks will no longer be insurable, but that households and businesses may no longer be able to stay in their current location and may have to relocate. A number of insurers cooperate with local governments in public-private sector partnerships to share their expertise in risk awareness and management, e.g. to provide affordable insurance and high penetration rates.	Noted. Your argument on relocation is taken into account in the added Box on the protection gap.
Caisse des Depôts Group	No views	Noted.
AMICE	Public-private partnerships can be a good way to combine the role of the public government with the infrastructure of the insurance industry. Especially for flood risk this could work well, but try to avoid a "one size fits all" strategy. Every country/region is different.	Agreed. EIOPA acknowledges that public-private cooperations may - depending on the topic - take place at regional, national or European level.
GLOBAL WARNING	N/A	Noted.



Question 25: Do you have evidence on Solvency II impacting the insurance protection gap (e.g. for natural catastrophe risks) in light of climate change? Please elaborate.

	Question 25: Do you have evidence on Solvency II impacting the insurance protection gap	Response from EIOPA
Name of the organisation	(e.g. for natural catastrophe risks) in light of climate change? Please elaborate.	
SD-M GmbH	No comment.	Noted.
ClientEarth	-	Noted.
Financial Guard Ltd	No	Noted.
German Insurance Association	No, there are no indications.	Noted.
Association of German Public		
Insurers - Verband öffentlicher		Noted.
Versicherer (VöV)	We do not see any evidence.	
FERMA - Federation of		
European Risk Management		Noted.
Associations	n/a	
German Association of Private	Regarding this question we would like to refer to the statement filed by the German Insurance	Noted.
Health Insurers (PKV)	Association (GDV) which is supported by us.	
	We do not have evidence.	
	The increased pressure to improve Nat Cat Risk assessment (esp. at the point of Underwriting,	
	which is also the inherent interest of the re/-insurance industry) and recent and anticipated	Noted. Your considerations are taken into
Allianz SE	progress in this domain might lead to more geographic/ localized risk avoidance and premium	account in a separate box on the protection ga
	changes - these could widen the protection gap. EIOPA could consult with governments, monitor	
	this development in the future and eventually intervene, if need be, but focus should not only be on	
	the insurance regulatory side.	
Investment & Life Assurance		Noted.
Group	No response	
Vienna Insurance Group AG		Noted.
Wiener Versicherung Gruppe	-	
	No, we do not have hard evidence/statistics to indicate a growing protection gap. However, even if	
	there were a growing gap it would not necessarily be attributable to climate change and could instead be explained by, for example:	Noted Your arguments are taken into account
Actuarial Association of Europe	• better data analysis leading to identification of uninsurable risks; and /or□	Noted. Your arguments are taken into account
	• higher volumes of property being built in risky areas □	the added Box on the protection gap.
European Savings and Retail		
Banking Group	_	Noted.
	We do not have any evidence on this.	
	The increased pressure to improve Nat Cat Risk assessment (esp. at the point of Underwriting,	
	which is also the inherent interest of the re/-insurance industry) and recent and anticipated	
EIOPA insurance and re-	progress in this domain might lead to more geographic/ localized risk avoidance and premium	Noted. Your considerations are taken into
insurance stakeholder group	changes - these could widen the protection gap. EIOPA could consult with governments, monitor	account in a separate box on the protection ga
	this development in the future and eventually intervene, if need be, but focus should not only be on	
	the insurance regulatory side.	
Finance Watch	-	Noted.
	No direct evidence available. No impact from Solvency II is expected on insurance protection gap	
Insurance Europe	in Europe (see answer to Q25).	Noted.
·		
Assuralia	No direct evidence available.	Noted.
Caisse des Depôts Group	No views	Noted.
	The outcome of the review of the standard formula shows that some of the new parameters	
	introduced could enlarge this protection gap if reinsurance covers are too expensive or not	
AMICE	available at all; Insurers may not be able to cover the same number of risks.	Noted.
GLOBAL WARNING	N/A	Noted.

Question 26: (a) Do you support the views on the treatment of sustainability risks in the market risk module?

Name of the organisation		Please elaborate.	Respon
SD-M GmbH		No comment.	Noted.
ClientEarth	n/a	-	Noted.
Financial Guard Ltd	Yes		Noted.
		Generally, the prudent person principle requires already today that financially relevant sustainability risks relating to the investment portfolio are taken into account. This aspect is already stressed within EIOPA's tech-nical advice on the integration of sustainability risks and factors a consideration of sustainability factors. There is no clear evidence of differences between green assets or brown assets at aggregate level. If green or brown assets are exposed to different risks than other assets of the same asset class, these risks should be taken in account. In general, all financially material risks should be recognised in the investment process. This also holds true for integrating sustainability risks. Therefore, if risks are similar, green or brown assets should not be treated differently.	
German Insurance Association		There is also no clear evidence of differences in correlation between green assets or brown assets. There is not enough data and thus no statistical evidence on correlations between green and brown assets on the one hand and standard formula asset classes on the other hand. If asset classes in the standard formula framework should be refined with respect to green and brown assets, a precondition should be to build up a pan-European data base or at least to initiate a research project assigned to an independent institution such as a European Supervisory Authority to validate correlation and risk parameters of green and brown investments. Furthermore we propose to review the combination of green assets with low physical and transition risks. In certain cases green assets may also be exposed to physical risks to a great extent (e.g. offshore wind power).	Notod
		Therefore, we agree with EIOPA that no clear conclusions can be drawn as to the difference in risk profile of sustainable and non-sustainable assets. Also due to the lack of a reliable database and lack of common defi-nition it is difficult to assess risk profiles and potential differences in risks.	Noted.
		Once the Environmental factor is clarified in a consistent and comparable way (taxonomy), all investors will be better positioned to assess their asset allocations against climate change objectives. However, the Taxonomy would only be fit for purpose in project finance (one economic activity, static definition of "green" is well applicable) but not for financing of entire companies / conglomerates due to shifts in activities and strategy carbon footprint which could materially change. Apart from that the data needs to come from companies invested in due to the fact that the data needs to be available, and to be harmonized. Hundreds or even thousands of activities of one company cannot be assessed by investors, alternatively they have to outsource the data assessment on research providers / ESG rating agencies which would create further dependencies, see Question 6.	
		In summary, the (current) lack of reliable data in combination with no ade-quate risk modelling approach as well as lacking definition should not lead to a politically motivated implementation of quantitative requirements and adjustments of the Solvency II framework. As previously stated, integration of sustainability risks should be implemented on an individual company level and within the qualitative investment process stage.	
	n/a	Furthermore, we would like to emphasise that the unsatisfactory database proves scenario analysis and stress testing to be very difficult in practice.	
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	n/a	Noted.
	11/a	FERMA shares EIOPA's views that the current design of Solvency II capital requirements should:	
		•rēmain risk-based and on a 1-year time horizon;□	
		•rēmain neutral to different types of risks and not impose sustainable investment incentives;□ •rīot introduce a separate risk module for sustainability risks as they already materialise through existing risk categories.□	
FERMA - Federation of European Risk Management Associations		Future evolution of climate change is undoubtedly a long-term trend and will be factored into the SCR by the regular recalibration of volatility factor for relevant line of business.	Noted.
	No	Captive (re) insurance undertakings are almost exclusively involved in the coverage of non-life, industrial or commercial risks. Coverage of third-party risks is generally not a major part of a captive business and therefore the sustainability requirements should be appropriately adjusted to ensure proportionality.	
German Association of Private Health Insurers (PKV)	n/a	Regarding this guestion we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	Yes	We agree with EIOPA's findings regarding Solvency II having no bias with regard to investments in sustainable assets.	Noted.
	100	ILAG agrees that the lack of a common definition makes sustainability risks in asset classes hard to assess consistently.	Noteu.
		The existing treatment of market risk neither incentivises nor disincentivises investment in so-called 'green assets' or 'brown assets'. ILAG believes that this is the appropriate treatment for sustainability risks within the existing Pillar 1 framework.	
Investment & Life Assurance Group		ILAG asks that EIOPA considers carefully the implications of introducing incentives (as has been done with infrastructure assets) and whether differential capital treatment is appropriate. In particular, EIOPA should consider whether sustainable assets truly are less risky, whether these assets are exposed to different types of risks (such as political risk), and take into account the developing taxonomies surrounding sustainable investments.	Noted
	Yes	ILAG believes that determining a risk-based capital requirement for any risk may be too difficult at this stage. Consequently we believe that assessments of sustainability risks should occur in the ORSA.	
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a	-	
Actuarial Association of Europe	Yes	Yes, though it might not be easy to identify sustainability risk with regard to market risks. We agree that property risk, spread risk and equity risk are those risks potentially affected by climate change.	Noted

onse from EIOPA

		T	-	
European Savings and Retail	- 1-			
Banking Group	n/a	- Yes. We agree that in principle the current Solvency II framework does not represent a barrier to investments in sustainable assets. We also agree with EIOPA's acknowledgement in point 9.15 that investing in a sustainable manner often requires long-term engagement. Therefore, any barriers to follow a long-term investment strategy also represent barriers to investing sustainably.	,	
EIOPA insurance and re- insurance stakeholder group		In general, there is no clear available evidence that shows risk differences between green assets or brown assets that would justify a different calibration of capital requirements. In this respect, we support EIOPA's view that any differential treatment of investments should be based on a proven difference in the underlying risks (point 9.16). One additional concern is that special capital requirements for "green" assets would drive a green investment niche and therefore would not help shift trillions of financial flows to sustainable investments.	Noted.	
	Yes	Overall, we agree with EIOPA that the current design of Solvency II capital requirements should remain risk-based and on a 1-year time horizon. Introducing a separate risk module for sustainability risks is not necessary as they already materialise through existing risk categories.		
Finance Watch	Yes	EIOPAs approaches in 9.12, 9.13, 9.16 and 9.17 reflect positive avenues to pursue.	Noted.	
		The insurance sector agrees that in principle the current Solvency II framework does not represent a barrier to investments in sustainable assets and that some market risk categories might be more affected by sustainability considerations, ie "property risk", and possibly counter party default risk in relation to mortgage loans.		
		The industry also agrees with EIOPA's acknowledgement in point 9.15 that investing in a sustainable manner often requires long-term engagement. Therefore, barriers to follow a long-term investment strategy also represent barriers to investing sustainably.	Noted.	
Insurance Europe		The industry is not in favour of the inclusion of a green supporting factor or a brown penalising factor in the SCR calculation. In general, there is no clear available evidence that shows risk differences between green assets or brown assets at aggregate level. In this respect, the sector supports EIOPA's view that any differential treatment of investments should be based on a proven difference in the underlying risks (point 9.16).	EIOPA evidenc	
	Yes	If asset classes in the standard formula framework should be refined with respect to the exposures to physical, transition and sustainability risks, the best way forward would be to investigate correlations and risk parameters of specific asset classes with high-quality data.		
		The insurance sector agrees that in principle the current Solvency II framework does not represent a barrier to investments in sustainable assets and that some market risk categories most likely to be affected by sustainability considerations are "property risk" and possibly "equity risk" and "spread risk".		
		The industry also agrees with EIOPA's acknowledgement in point 9.15 that investing in a sustainable manner often requires long-term engagement. Therefore, barriers to follow a long-term investment strategy also represent barriers to investing sustainably.		
Assuralia		The industry not in favour of the inclusion of a green supporting factor or a brown penalising factor in the SCR calculation. In general, there is no clear available evidence that shows risk differences between green assets or brown assets at aggregate level. In this respect, the sector supports EIOPA's view that any differential treatment of investments should be based on a proven difference in the underlying risks (point 9.16).	Noted.	
	Yes	If asset classes in the standard formula framework should be refined with respect to the exposures to physical, transition and sustainability risks, the best way forward would be to investigate correlations and risk parameters of specific asset classes.		
Caisse des Depôts Group	n/a	No views	Noted.	
AMICE	Yes	In our view, the current calibration should neither be adjusted for sustainability risk nor should the methodology be changed.	Noted.	
GLOBAL WARNING	No	N/A	Noted.	

(b) Do y	you have	further	evidence	which s	should l	be considered?	?

Name of the organisation	(b) Do yo	uPlease elaborate.	Response from EIOPA
SD-M GmbH	No	No comment.	Noted.
ClientEarth	n/a	-	Noted.
Financial Guard Ltd	No		Noted.
German Insurance Association	n/a	n/a	Noted.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	n/a	Noted.
FERMA - Federation of European Risk Management Associations	n/a	n/a	Noted.
German Association of Private Health Insurers (PKV)		Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	No	We have no further evidence.	Noted.
Investment & Life Assurance Group	No	No comment	Noted.
Vienna Insurance Group AG	n/a	-	Noted.

1.
I. A did not investigate correlations and did also not receive any nce that would warrent further work.
I. I. I. I.
l.

	Νο	There is, at this stage, still no reliable evidence that sustainable investments have a different risk profile. The lack of data is the weak point in connection with questions 27 to 31 relating to capital requirements. The Solvency II framework should abstain from giving investment incentives. Such incentives, if at all, should be given by fiscal policy or legislative/law policies affecting all investors and not specifically the (re)insurance sector. This does not prevent a continuation of research and monitoring and the work on a common taxonomy would give an important boost to facilitate data gathering and treatment. A shift to assets qualifying as sustainable could change the level of liquidity in the various markets with different effects: •In the short term, the valuation of sustainable assets (increased liquidity) would increase, driving their yields down and vice versa for non-sustainable assets (decreased liquidity), similar to a bond losing liquidity when moving from Investment Grade to non-Investment Grade rating. •In the longer term, a new "equilibrium" would depend on the universe of investors for both asset classes, e.g. less regulated investors could invest •If the market anticipates changes in liquidity, relative valuations of sustainable assets versus non-sustainable assets could change, making the analysis of risks and returns very demanding, i.e. regulatory changes could well impact market prices.	Noted.
European Savings and Retail	n/a		Noted.
Banking Group EIOPA insurance and re- insurance stakeholder group		No. We agree with EIOPA that no clear conclusions can be drawn as to the difference in risk profile of sustainable and non-sustainable assets. If there is any evidence that green or brown assets are exposed to different risks than other assets of the same asset class, than such differences should be taken into account in the measurement of capital requirements. In fact, the prudent person principle requires insures to consider financially relevant sustainability risks in their investment portfolio. This aspect is already stressed in EIOPA's technical advice on the integration of sustainability risks and factors in Solvency II. We also reiterate that the classification of assets for prudential reasons should be based on their specific exposure to physical and transition risks. The ESG factors need to be considered together and on a case by base approach. In certain cases, the so called "green" assets may also be exposed to physical risks to a great extent. Therefore, it is key to look at the risk exposure of the specific assets	Noted.
Finance Watch	No	-	Noted.
Insurance Europe	Νο	The sector agrees with EIOPA that no clear conclusions can be drawn as to the difference in risk profile of sustainable and non-sustainable assets. There is no clear available evidence that shows risk differences between green assets or brown assets at aggregate level. If there is any evidence that green or brown assets are exposed to different risks than other assets of the same asset class, these risks should be taken in account. In fact, the prudent person principle requires insures to consider financially relevant sustainability risks in their investment portfolio. This aspect is already stressed within EIOPA's technical advice on the integration of sustainability risks and factors in Solvency II. Once the work on the EU taxonomy on sustainability is complete, and corporates start reporting accordingly, all investors will be better positioned to assess their asset allocations against climate change objectives. In this respect, the insurance sector reiterates that: - The ESG factors need to be considered together and on a case by base approach. This will avoid instances where, on the one hand, a "green" asset has negative social impact, and on the other hand, a "brown" asset has positive social impact. □ - The EU taxonomy is not a prudential tool designed to identify assets that have a higher/lower exposure to physical, transition and sustainability risks or to assess the sustainability risks of investments. The taxonomy provides a sustainability classification of economic activities. However, the classification of assets for prudential reasons should be based on their specific exposure to physical and transition risks. In certain cases, the so called "green" assets may also be exposed to physical risks to a great extent (eg offshore wind power). Therefore, it is key to look at the risk exposure of the specific assets.	Noted. EIOPA
Assuralia	Νο	The sector agrees with EIOPA that no clear conclusions can be drawn as to the difference in risk profile of sustainable and non-sustainable assets. There is no clear available evidence that shows risk differences between green assets or brown assets at aggregate level. If there is any evidence that green or brown assets are exposed to different risks than other assets of the same asset class, these risks should be taken in account. In fact, the prudent person principle requires insures to consider financially relevant sustainability risks in their investment portfolio. This aspect is already stressed within EIOPA's technical advice on the integration of sustainability risks and factors in Solvency II. Once the work on the EU taxonomy on sustainability is complete, all investors will be better positioned to assess their asset allocations against climate change objectives. In this respect, the insurance sector reiterates that: The ESG factors need to be considered together and on a case by base approach. This will avoid instances where, on the one hand, a "green" asset has negative social impact, and on the other hand, a "brown" asset has positive social impact. The EU taxonomy is not a prudential tool designed to identify assets that have a higher/lower exposure to physical, transition and sustainability risks or to assess the sustainability risks of investments. The taxonomy provides a sustainability classification of economic activities. However, the classification of assets for prudential reasons should be based on their specific exposure to physical and transition risks. In certain cases, the so called "green" assets may also be exposed to physical risks to a great extent (e.g. offshore wind power). Therefore, it is key to look at the risk exposure of the specific assets. The assessment of potential differences in risks is exacerbated by the lack of common definitions and a reliable database (e.g. on differences in correlation between green assets or brown assets, as well as those between green/ brown asset	Noted. EIOPA
Caisse des Depôts Group		No views	Noted.
AMICE		We do not have further evidence	Noted.
GLOBAL WARNING	n/a n/a		Noteu.

PA limited its consideration on "E" in ESG in this opinion. A limited its consideration on "E" in ESG in this opinion.

Question 27: Property risk Do you have additional views and evidence to be considered with regard to the integration of sustainability risks in property risk?

	Question 2	Please elaborate	Response
SD-M GmbH	No	No comment.	Noted.
ClientEarth	n/a	-	Noted.
Financial Guard Ltd	No	NA	Noted.
German Insurance Association	n/a	We agree with EIOPA that real estate is particularly exposed to physical and transitional climate risks (e.g. long-term nature of property investments) and that more transparency is required. In our view these consid-erations should be linked to paragraph 8.19, where green investment strategies based on certified real estate are mentioned. A "sustainable property index" may be an additional source of information. However, asset-level information is usually required to assess sustainable / climate risks in the real estate context, i.e. data availability is also a key challenge for real estate: •General real estate market data is already scarce •General real estate market data is already scarce •Real estate (market / performance) indices are already relying on a relatively small samples of properties / funds / investments (e.g. IPD). •Eor example, certified "green buildings" (as a potential proxy for sustainable real estate) only represent a very small share of the overall property market (no reliable information available, we assume <5%). Thus, a respective index will be even more challenging to create than a general one (e.g. due to sample size). •There is no clear definition for sustainable investments in the real estate context. In general (and probably discussed quite extensively), going for IPD indices that have a substantial weight reg. UK real estate or going for UK data	Noted. EIOPA po calibration opinion to investigat be used t
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV) FERMA - Federation of European Risk Management	n/a n/a	(high volatility compared to other real estate markets) to derive property capital requirements is in our opinion very controversial.	Noted.
Associations		n/a	Noted.
German Association of Private Health Insurers (PKV)	n/o	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	-	No	Noted.
Investment & Life Assurance Group	Yes	As EIOPA highlights, for property, sustainability risks arise from various sources. Aggregating and determining the dependency / correlation between each of these risks is non-trivial. An appropriate capital charge will depend upon the specific risks affecting a property, noting that each property within a portfolio will be exposed to different risks. ILAG believes that capturing these risks and the interactions between them within the Pillar 1 capital charge is not appropriate. Moreover, the risk to property prices is not one-directional – for example, individuals and businesses moving away from areas prone to flooding will be likely to stimulate an increase in prices of property in areas that have been less prone to flooding. ILAG reiterates that it believes the ORSA is the most appropriate place to consider this risk, rather than through a specific capital requirement calculation.	Noted.

nse from EIOPA

A points out, that the IPD index was used in the original ation and therefore it was not part of this work for this in to adress the general calibration. Instead, EIOPA gated whether there are comparable indices that could ad to analyse the different risk profiles.

Vienna Insurance Group AG Wiener Versicherung Gruppe	Yee	Solvency II is based on a holistic risk assessment, considering a broad range of risks. This risk-based nature of Solvency II should be maintained, i.e. any artificial incentivation has to be avoided. Therefore, any additions to the SCR standard formula would only be justified in case there is a true risk differential. Such a risk differential can be found in regulated housing markets of some Member States ("affordable housing markets"). In its request of 28 August 2018 the European Commission invited EIOPA to provide "criteria to identify sustainable investments that could benefit from a more favourable treatment." Across Member States the following three assessment criteria could be used to identify sustainable investments in affordable housing: (1) yield stability: the setting of the rent and rent increases are detached from fluctuations of the rental market, i.e. offer and demand in the rental market. Alternatively the rent is linked to other indicators, e.g. cost recovery for the purchase of building areas, construction, administration, maintenance and renovation of residential real estate dedicated to affordable housing. The regulated investor yield is subject to legal provisions of the relevant Member State require a proportionate use of profits to ensure a relevant level of reinvestment to to the benefit of the purchase of building areas, construction, administration, maintenance and renovation of residential real estate dedicated to affordable housing.	Noted. A consider
		 (3) fungibility: legal provisions of the relevant Member State require a long-term asset allocation of the insurance undertaking in residential real estate dedicated to affordable housing. In line with a truly risk-based approach, regulated housing markets should be subject to a differentiated treatment, i.e. a different capital charge reflecting their positive impact on financial stability. 	
Actuarial Association of Europe	We agree with FIOPA's opinion (para 9.24) that more data would be needed. We agree with the need to have more than one index to identify a		Noted.
European Savings and Retail Banking Group	n/a	-	Noted.
EIOPA insurance and re- insurance stakeholder group	Vac	We see that future evolution of climate change is undoubtedly a long-term trend and will be factored into the SCR by the regular recalibration of volatility factor for relevant line of business. We believe that using IPD indices with substantial weights on the UK real estate market is inappropriate. UK data do not capture the specificities of other real estate markets in the EU and are highly volatile compared to them. This considered, we agree with EIOPA that more transparency can help address real estate exposure to physical and transitional climate risks (e.g. long-term nature of property investments). As a solution, EIOPA states that a comparable IPD total return index and a sustainable investment index are needed. While such indices may be a useful source of information, both a clear definition of green/sustainable property and more granular data would be needed in order to calculate a different risk profile for a subset of the property risk. Such an approach would also be challenging for several reasons, eg:	Noted.
		□ The difficulty to capture both physical risks and energy efficiency □ The geographical differences throughout Europe □ The lack of data at market and asset levels	
Finance Watch	Yes	There are serious issues and concerns over the use of capital charging approaches and the way in which they steer insurers' asset allocation decisions – both generally and for sustainability purposes. These concerns are ultimately that regulation based on risk weighting and internal modelling is overly complex and prone to manipulation to be able to properly achieve its objectives.	

. Affordable housing is outside of scope of the leration of this opinion.

Insurance Europe	No	The insurance industry reiterates that using IPD indices with substantial weights on the UK real estate market is inappropriate. UK data do not capture the specificities of other real estate markets in the EU and are highly volatile compared to them. This considered, the insurance sector agrees with EIOPA that more transparency can help address real estate exposure to physical and transitional climate risks (eg long-term nature of property investments). As a solution, EIOPA states that a comparable IPD total return index and a sustainable investment index are needed. While such indices may be a useful source of information, both a clear definition of green/sustainable property and more granular data would be needed in order to calculate a different risk profile for a subset of the property risk. Such an approach would be challenging for a number of reasons:	Noted. EIOPA calibrat opinion investig be used
Assuralia	No	The insurance industry reiterates that using IPD indices with substantial weights on the UK real estate market is inappropriate. UK data do not capture the specificities of other real estate markets in the EU and are highly volatile compared to them. This considered, the insurance sector agrees with EIOPA that more transparency can help address real estate exposure to physical and transitional climate risks (e.g. long-term nature of property investments). As a solution, EIOPA states that a comparable IPD total return index and a sustainable investment index are needed. While such indices may be a useful source of information, both a clear definition of green/sustainable property and more granular data would be needed in order to calculate a different risk profile for a subset of the property risk. Such an approach would be challenging for a number of reasons: The difficulty to appropriately capture both physical risks and energy efficiency. The geographical differences throughout Europe, especially for physical risks The lack of data at market level and at asset level Reliable data on Scope 3 emissions, etc. The industry stresses that asset-level information is key to assess sustainability and climate risks in the real estate context. Focusing on this aspect, it is clear that information is ergonorizely sustainability, e.g. by taking into account SCOPE 3 emissions. Certified "green buildings" (as a proxy for sustainable real estate) represent a small share of the overall property market, meaning that the creation of a sustainable index will be extremely challenging, e.g. due to representation and sample size. For example, in Belgium energy certificate is only required at the time of a sale or rental. Homeowners have no incentive to have an energy certificate (people who are not moving). Nor to renew the certificate after renovations, even though renovations often include energy saving measures that would preverting such as a proxy for sustainable real estate. However, for existing buildings an energy certificat	Noted. EIOPA calibrat opinion investig be used

PA points out, that the IPD index was used in the original pration and therefore it was not part of this work for this ion to adress the general calibration. Instead, EIOPA stigated whether there are comparable indices that could used to analyse the different risk profiles.

PA points out, that the IPD index was used in the original ration and therefore it was not part of this work for this on to adress the general calibration. Instead, EIOPA stigated whether there are comparable indices that could sed to analyse the different risk profiles.

-			
Caisse des Depôts Group	Yes	Solvency II is based on a holistic risk assessment, considering a broad range of risks. This risk-based nature of Solvency II should be maintained, i.e. any artificial incentivization has to be avoided. Therefore, any additions to the SCR standard formula would only be justified in case there is a true risk differential. Such a risk differential may be found in the residential market and even more in regulated housing markets: in some Member States ("affordable housing markets"). Indeed, at least in France, the residential market as whole is less volatile compared to other asset classes : for 1998 – 2018, it experienced a 5% standard deviation < 6% for the office market < 7% for the retail market (Source: MSCI, IEIF, JPM). This feature is even stronger for regulated property which can be identified across the EU through three fundamental criteria: 1)Yield stability: the setting of the rent and rent increases are detached from fluctuations of the rental market (offer and demand in the rental market). Alternatively, the rent is linked to other indicators, e.g. cost recovery for the purchase of building areas, construction, administration, maintenance and renovation of residential real estate dedicated to affordable housing. The regulated investor yield is subject to legal provisions of the relevant Member State require a proportionate use of profits to ensure a relevant level of reinvestment to the benefit of the purchase of building areas, construction, administration, maintenance and renovation of residential real estate dedicated to affordable housing. Moreover, in France, to prevent speculative actions, no sale is allowed, for intermediate housing, during the first 10 years of operation. For social housing, sale is not allowed and when it is, the capital gain has to be reinvested for other isocial housing operations. 3)Fungibility: legal provisions of the relevant Member State require a long-term asset allocation of the insurance undertaking in residential real estate dedicated to affordable housi	Noted. A
AMICE	No	Sustainability risk is already included in the economic value of property. There is no clear evidence how "more sustainable housing" would translate into more or less volatile market prices and risks. We have to bear in mind that the capital requirements are based on the one-year horizon assumption; if sustainability risk were to be integrated, the scenarios would assume that the market would suddenly differentiate between sustainable and non-sustainable properties. This could only happen if an overwhelming majority of properties had already been transformed according to the proposed sustainability considerations. The remaining small portion of properties not transformed could be considered as riskier.	Noted.
GLOBAL WARNING	n/a	N/A	Noted.

Affordable housing is outside of scope of the eration of this opinion.

Question 28: Equity risk (a) Do you have comments on the analysis of risk differentials for listed equity?

Name of the organisation	Question 2	Please elaborate.	Response from EIOPA
SD-M GmbH	No	No comment.	Noted
ClientEarth	n/a	-	
Financial Guard Ltd	No	NA	Noted
German Insurance Association	Yes	We agree with EIOPA that equity prices are multifactorial and therefore sustainability risks and factors are difficult to isolate and that the necessary long-term data required for analyzing potential risk differences does not exist.	Noted
Association of German Public			
Insurers - Verband öffentlicher	n/a	n/a	Noted
FERMA - Federation of European Risk Management	,		
	n/a	n/a	Noted
German Association of Private Health Insurers (PKV)	n/a	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted
Allianz SE	No	No comments	Noted
Investment & Life Assurance Group	Yes	While the analysis presented is useful, ILAG notes that there is no generally accepted definition of a 'sustainable' or 'green' investment. We would also caution against over-reliance on the MSCI definition of the 'Environmental' and the Dow Jones definition of 'Sustainability World' in determining an indicative capital charge.	EIOPA is aware of limitation of using few da tried to used several sources and also highli EIOPA is welcoming any suggestions for us history covering at least two economic cycle
Vienna Insurance Group AG			
Wiener Versicherung Gruppe	n/a	-	
Actuarial Association of Europe	Yes	We agree with EIOPA's conclusion, that the coverage of more than one economic cycle is necessary to draw a meaningful conclusion on the difference in risk profile for sustainable and non-sustainable listed equities.	noted
European Savings and Retail			
Banking Group	n/a	-	
EIOPA insurance and re- insurance stakeholder group	No	 No. We agree with EIOPA that equity prices are multifactorial and therefore sustainability risks and factors are difficult to isolate and that the necessary long-term data required for analysing potential risk differences does not exist. Due to existing issues, we believe that it is premature to differentiate capital requirements for sustainable listed and unlisted equity at this stage, even though it might be possible in the future. Equally important, a binary green/brown approach is not a precondition for insurers adopting efficient asset allocations against climate change considerations. In general, despite the focus on climate change of the EC call for opinion, we regret that the current discussions completely ignored the social and governance aspects, which are pillars of sustainability. The risk analysis needs to be done on a case by case basis and consider sustainability risks holistically. This will enable insurers to be efficient in their role of investors and potential partner of changes. 	Noted
		EIOPA should carefully investigate concerns raised that certain risk charges in Solvency II are not	
Finance Watch	Yes	properly calibrated and discourage investment in equities, listed and unlisted, and unrated debt. There may to be evidence to suggest that insurers have scaled back their engagement in equities and that private equity funds are able to outbid the public markets for assets. We recognise that this could be attributable, at least in part, to different drivers such as perceived excessive valuation levels in listed equities and the ability of private equity funds to take on high levels of very low cost debt. However, if EIOPA can establish that there is genuine evidence of an imbalance in Solvency II that penalises equities and discourages insurers from investing in the real economy then it should be addressed.	Noted. The general calibration of SCR is our

w data providers, therefore EIOPA
highlighted the issue in the opinion.
or use of other data series with at
cycles.
is outside of scope of this opinion.

		-	
		The insurance sector agrees with EIOPA that equity prices are multifactorial and therefore sustainability risks and factors are difficult to isolate, and that the necessary long-term data required for analysing potential risk differences does not exist.	
		Due to existing issues, the insurance industry believes that it is premature to differentiate capital requirements for sustainable listed and unlisted equity based on risk differentials, even though it might be possible in the future. Equally important, a binary green/brown approach is not a precondition for insurers adopting efficient asset allocations against climate change considerations.	
Insurance Europe		Apart from that, the following aspects are also relevant: The underlying investments have a dynamic component which insurers can affect through dialogue with the management and use of voting rights, when relevant. Some underlying activities are necessary for the transition or hard to categorise, which makes the risk assessment even more controversial, eg there is no real alternative for metallurgical coal necessary for steel production.	
	No	Therefore, the risk analysis needs to be on a case by case base and consider sustainability risks holistically. This will enable insurers to be efficient in their role of investors and potential partner of changes.	noted
		The insurance sector agrees with EIOPA that equity prices are multifactorial and therefore sustainability risks and factors are difficult to isolate and that the necessary long-term data required for analysing potential risk differences does not exist.	
		The insurance industry believes that capital requirements are not supposed to differ for sustainable listed and unlisted equity. Equally important, a binary green/brown approach is not a precondition for insurers adopting efficient asset allocations against climate change considerations.	
Assuralia		In general, despite the focus on climate change of the EC call for opinion, we regret that the current discussions completely ignored the social and governance aspects, which are pillars of sustainability. Considering these aspects is key because:	
		The underlying investments have a dynamic component which insurers can affect through dialogue with the management and use of voting rights, when relevant.	
		There can be conflicts between sustainability aspects, e.g.	
		ā "green" asset could have negative social impact while a "brown" asset a positive social impact	
		ā "green" asset could be exposed to reputational risks arising from social considerations□ some underlying activities are necessary for the transition or hard to categorise, which makes	
		the risk assessment even more controversial, e.g. there is no real alternative for metallurgical coal	
		necessary for steel production.	
Coisso dos Donête Croun	No n/a	No views	see number 20
Caisse des Depôts Group	n/a	We do not think that an analysis of risk differential for listed equity is needed. For listed equities,	noted
AMICE		one has to assume that the markets would price any relevant sustainability considerations into the	
	No	economic valuation.	noted
GLOBAL WARNING	n/a	N/A	

(b) Do you have additional views and evidence to be considered with regard to the integration of sustainability

	ri	sks in listed equity risk capital charges?	
Name of the organisation	(b) Do you	Please elaborate.	Response from EIOPA
SD-M GmbH	No	No comment.	Noted
ClientEarth	n/a	-	
Financial Guard Ltd	No	NA	
German Insurance Association	n/a	n/a	





	1	1	1
Association of German Public			
Insurers - Verband öffentlicher			
Versicherer (VöV)	n/a	n/a	
FERMA - Federation of			
European Risk Management			
Associations	n/a	n/a	
German Association of Private		Regarding this question we would like to refer to the statement filed by the German Insurance	
Health Insurers (PKV)	n/a	Association (GDV) which is supported by us.	Noted
Allianz SE	No	No further comments.	Noted
Investment & Life Assurance			
Group	No	No comment	Noted
Vienna Insurance Group AG			
Wiener Versicherung Gruppe	n/a	-	
		We agree, that a reconsideration may be possible, when adequate data is available, to allow a differentiation between the risk profiles of assets based on their sustainability characteristics. However, in the absence of reliable evidence at this stage, there is no reason to assume a meaningful difference in risk profile for sustainable equities compared to other equities.	
Actuarial Association of Europe	Yes		Noted
European Savings and Retail			
Banking Group	n/a		
EIOPA insurance and re-			
insurance stakeholder group	No		
Finance Watch	Yes	Please see input under question 28 (a).	Noted
Insurance Europe	No	· · · · · · · · · · · · · · · · · · ·	
Assuralia	No	/	
Caisse des Depôts Group	n/a	No views	Noted
AMICE	No		Noted
GLOBAL WARNING	n/a	N/A	

(c) Do you have additional views and evidence to be considered with regard to the integration of sustainability risks in unlisted equity risk capital charges?

Name of the organisation	(c) Do you	Please elaborate.	Response from EIOPA
SD-M GmbH	No	No comment.	Noted
ClientEarth	n/a	-	
Financial Guard Ltd	No	NA	
German Insurance Association	n/a	n/a	
Association of German Public			
Insurers - Verband öffentlicher			
Versicherer (VöV)	n/a	n/a	
FERMA - Federation of			
European Risk Management			
Associations	n/a	n/a	
German Association of Private		Regarding this question we would like to refer to the statement filed by the German Insurance	
Health Insurers (PKV)	n/a	Association (GDV) which is supported by us.	Noted
Allianz SE	No	No further comments.	Noted
Investment & Life Assurance			
Group	No	No comment	Noted
Vienna Insurance Group AG			
Wiener Versicherung Gruppe	n/a	-	

Actuarial Association of Europe	No	No additional views	Noted
European Savings and Retail			
Banking Group	n/a	-	
EIOPA insurance and re-			
insurance stakeholder group	No	-	
Finance Watch	Yes	Please see input under question 28 (a).	Noted
Insurance Europe	No	•	
Assuralia	No	/	
Caisse des Depôts Group	n/a	No views	Noted
		No changes are needed as there is no evidence that one particular category (if established and	
AMICE	No	possible) would be riskier than the others over a 1-year time horizon.	Noted
GLOBAL WARNING	n/a	N/A	

(d) Which data sources or research conducted would be relevant to consider for unlisted equity risk capital charges?

	(d) Which data sources or research conducted would be relevant to consider for unlisted	
Name of the organisation	equity risk capital charges?	Response from EIOPA
SD-M GmbH	No comment.	Noted.
ClientEarth	-	Noted.
Financial Guard Ltd	NA	Noted.
German Insurance Association	n/a	Noted.
Association of German Public		
Insurers - Verband öffentlicher		
Versicherer (VöV)	n/a	Noted.
FERMA - Federation of		
European Risk Management		
Associations	n/a	Noted.
German Association of Private	Regarding this question we would like to refer to the statement filed by the German Insurance	
Health Insurers (PKV)	Association (GDV) which is supported by us.	Noted.
Allianz SE	No further comments.	Noted.
Investment & Life Assurance		
Group	None provided	Noted.
Vienna Insurance Group AG		
Wiener Versicherung Gruppe	-	Noted.
Actuarial Association of Europe	A long data history would be required including a broad range of different sectors and companies.	Noted.
European Savings and Retail		
Banking Group	-	Noted.
EIOPA insurance and re-		
insurance stakeholder group	-	Noted.
Finance Watch	-	Noted.
Insurance Europe	-	Noted.
Assuralia	/	Noted.
Caisse des Depôts Group	No views	Noted.
AMICE	N/A	Noted.
GLOBAL WARNING	N/A	Noted.

Question 29: Spread risk (a) Do you have additional views and evidence to be considered with regard to the integration of sustainability risks in spread risk capital charges?

Name of the organisation	Question	Please elaborate.	Response from EIOPA
SD-M GmbH	No	No comment.	Noted.
ClientEarth	n/a	-	Noted.
Financial Guard Ltd	No	NA	Noted.
		We agree with EIOPA that the volume of data on green bonds is not large enough and too recent	
German Insurance Association		to be reliable. Moreover, it does not reflect any crisis situations. Therefore we believe that the	
	n/a	available information does not allow for a risk assessment concerning sustainability.	Noted.
Association of German Public			
Insurers - Verband öffentlicher			
Versicherer (VöV)	n/a	n/a	Noted.
FERMA - Federation of			
European Risk Management			
Associations	n/a	n/a	Noted.
German Association of Private	174	Regarding this question we would like to refer to the statement filed by the German Insurance	
	n/a	Association (GDV) which is supported by us.	Noted.
Health Insurers (PKV) Allianz SE	No	No further comments.	Noted.
Investment & Life Assurance	Vaa	As with the equity applying core people to be taken on the definition of a taken $a^{\prime\prime}$	Neted
Group	Yes	As with the equity analysis, care needs to be taken on the definition of a 'green bond'.	Noted.
Vienna Insurance Group AG	,		
Wiener Versicherung Gruppe	n/a		Noted.
Actuarial Association of Europe		Sufficient information would be an indispensable prerequisite in order to justify the integration of	
•	Yes	sustainability risks in spread risk capital charges.	Noted.
European Savings and Retail			
Banking Group	n/a	-	Noted.
EIOPA insurance and re-			
insurance stakeholder group		On one hand, we note that it is easier to identify sustainable fixed income assets, e.g. green	
insurance stakeholder group	Yes	project bonds, than sustainable equity assets.	Noted.
Finance Watch	No	-	Noted.
		On one hand, the insurance industry notes that it is easier to identify sustainable fixed income	
		assets, eg green project bonds, than sustainable equity assets. On the other hand, the sector	
		agrees with EIOPA that the volume of data required for a reliable calibration of spread risk on	
		green bonds is not large enough and too recent. In addition, many issuers of green bonds issue	
Insurance Europe		both green and regular bonds, which makes it difficult to argue that the capital charge on these two	
		types of bonds should be different. Therefore, while it may be easier to identify the financial	
		instruments it may still be very difficult at this stage to differentiate spread risk capital requirements	
		for sustainable assets.	
	Yes		Noted.
		On one hand, the insurance industry notes that it is easier to identify sustainable fixed income	
		assets, e.g. green project bonds, than sustainable equity assets. On the other hand, the sector	
		agrees with EIOPA that the volume of data required for a reliable calibration of spread risk on	
Assuralia		green bonds is not large enough and too recent. Therefore, while it may be easier to identify the	
		financial instruments it may still be very difficult at this stage to differentiate spread risk capital	
	No	requirements for sustainable assets.	Noted.
Caissa das Dapâta Craup	n/a	No views	Noted.
Caisse des Depôts Group	11/a		
		There is no need to differentiate if data only above a different behaviour of annode. But the issue	
AMICE	No	There is no need to differentiate if data only shows a different behaviour of spreads. But the issue	Noted
	No	is that there is no clear and unambiguous taxonomy to identify the appropriate bonds and loans.	Noted.

	-

GLOBAL WARNING		I invite EIOPA to read the excellent working paper on Green Bond by J. Lefournier and I. Ekland : L'obligation verte : homéopathie ou incantation http://events.chairefdd.org/lobligation-verte-homeopathie-ou-incantation/ or http://www.chair-energy-prosperity.org/publications/lobligation-verte-homeopathie-incantation/	
	Yes		Noted.

(b) Which data sources or research conducted would be relevant to consider for the integration of sustainability risks in spread risk capital charges?

risks in spread risk capital charges?				
Nome of the enveniencies	(b) Which data sources or research conducted would be relevant to consider for the	Deenenee from ELODA		
Name of the organisation	integration of sustainability risks in spread risk capital charges?	Response from EIOPA		
SD-M GmbH	No comment.	Noted.		
ClientEarth	•	Noted.		
Financial Guard Ltd	NA	Noted.		
German Insurance Association	n/a	Noted.		
Association of German Public				
Insurers - Verband öffentlicher				
Versicherer (VöV)	n/a	Noted.		
FERMA - Federation of				
European Risk Management				
Associations	n/a	Noted.		
German Association of Private	Regarding this question we would like to refer to the statement filed by the German Insurance			
Health Insurers (PKV)	Association (GDV) which is supported by us.	Noted.		
Allianz SE	No further comments.	Noted		
Investment & Life Assurance				
Group	None provided.	Noted.		
Vienna Insurance Group AG				
Wiener Versicherung Gruppe		Noted.		
Actuarial Association of Europe	See answer to Q29 d)	Noted.		
European Savings and Retail				
Banking Group	-	Noted.		
EIOPA insurance and re-	In line with a holistic approach to sustainability, we invite EIOPA to include in its analysis other	Noted. Given the request from the Comiss		
insurance stakeholder group	investments than green bonds, eg social bonds.	has been on the "E" (and especially on cli		
Finance Watch	·	Noted.		
Insurance Europe	-	Noted.		
	In line with a holistic approach to sustainability, the sector invites EIOPA to include in its analysis			
	other investments than green bonds, e.g. social bonds. This will avoid giving Green Bonds an	Noted. Given the request from the Comiss		
Assuralia	advantage over socially-focused bonds, like social bonds.	has been on the "E" (and especially on clin		
Caisse des Depôts Group	No views	Noted.		
AMICE	N/A	Noted.		
GLOBAL WARNING	N/A	Noted.		

(c) What are your views on the methodology for a green bond index?

Name of the organisation	(c) What are your views on the methodology for a green bond index?	Response from EIOPA
SD-M GmbH	No comment.	Noted.
ClientEarth	-	Noted.
Financial Guard Ltd	See answers to Question 6.	Noted.
German Insurance Association	n/a	Noted.
Association of German Public		
Insurers - Verband öffentlicher		
Versicherer (VöV)	n/a	Noted.

ssion, the focus in this opinion limate) in ESG.
ssion, the focus in this opinion imate) in ESG.



		1
FERMA - Federation of		
European Risk Management		Neted
Associations German Association of Private	n/a Descriptions this superfice we would like to refer to the statement filed by the Correspondence	Noted.
	Regarding this question we would like to refer to the statement filed by the German Insurance	Noted
Health Insurers (PKV)	Association (GDV) which is supported by us.	Noted.
Allianz SE	No further comments.	
	Notwithstanding the challenges raised around identifying green bonds, and in ensuring that a sufficiently large sample size can be collected, ILAG has no comments on the methodology	
	proposed.	
	proposed.	
	As market views on sustainability risks develop and the market's perception of risk develops, the	
	pricing practices of green bonds may vary from past practices. EIOPA must be careful if it uses	
Investment & Life Assurance	historical analysis to inform future guidance in relation to green bonds.	
Group		Noted.
Vienna Insurance Group AG		
Wiener Versicherung Gruppe	_	Noted.
	There are already methodologies for green bond indices. It would be good to merge them in one	
Actuarial Association of Europe	single methodology to create a market standard.	Noted.
European Savings and Retail		
Banking Group	-	Noted.
	EIOPA's proposed methodology appears reasonable. We agree with the limits of the proposed	
EIOPA insurance and re-	analysis in terms of available data for a reliable calibration. The other key issue is that sustainability	
insurance stakeholder group	risks might affect the spread through other means or variables, which should be reliably captured.	Noted.
Finance Watch	•	Noted.
	EIOPA's proposed methodology appears reasonable. The sector also agrees with the limits of the	
	proposed analysis in terms of available data for a reliable calibration.	
	The other key issue is that sustainability risks might affect the spread through other means or	
	variables. Therefore, the proposed methodology should also be complemented with an analysis	
	aimed at capturing these instances in a reliable manner.	
Insurance Europe		Noted.
	EIOPA's proposed methodology appears reasonable. The sector also agrees with the limits of the	
	proposed analysis in terms of available data for a reliable calibration.	
	The other key issue is that sustainability risks might affect the spread through other means or	
	variables. Therefore, the proposed methodology should also be complemented with an analysis	
	aimed at capturing these instances in a reliable manner.	
Assuralia		Noted.
Caisse des Depôts Group	No views	Noted
	We do not believe that there is need for a different index. We concur with EIOPA that good quality	
	data input would be needed first before developing a green bond index for calibration purposes.	
	The problem derived from potential "green washing" and the fact that green bond issuances have	
	only been available in greater volume since 2017 may impede the assessment of whether green	
	bonds are more or less risky than normal bonds, whether green bonds have a greater risk of	
	default and whether they would behave differently from a normal bond or loan issued by a wide	Neted
AMICE	variety of issuers.	Noted.
GLOBAL WARNING	N/A	Noted.

(d) Do you have additional views and evidence to be considered with regard to the integration of sustainability risks in unrated debt capital charges?

	(d) Do you have additional views and evidence to be considered with regard to the	
Name of the organisation	integration of sustainability risks in unrated debt capital charges?	Response from EIOPA
SD-M GmbH	No comment.	Noted.
ClientEarth	-	Noted.
Financial Guard Ltd	No	Noted.
German Insurance Association	n/a	Noted.





Association of German Public		
Insurers - Verband öffentlicher		
Versicherer (VöV)	n/a	Noted.
FERMA - Federation of		
European Risk Management		
Associations	n/a	Noted.
German Association of Private	Regarding this question we would like to refer to the statement filed by the German Insurance	
Health Insurers (PKV)	Association (GDV) which is supported by us.	Noted.
Allianz SE	No further comments.	Noted.
Investment & Life Assurance		
Group	No	Noted.
Vienna Insurance Group AG		
Wiener Versicherung Gruppe	-	Noted.
Actuarial Association of Europe	No	Noted.
European Savings and Retail		
Banking Group	-	Noted.
EIOPA insurance and re-		
insurance stakeholder group	No.	Noted.
Finance Watch	-	Noted.
Insurance Europe	No additional views.	Noted.
Assuralia	No additional views.	Noted.
Caisse des Depôts Group	No views	Noted.
	There is no need to differentiate if data only shows a different behaviour of spreads. But the issue	
AMICE	is that there is no clear and unambiguous taxonomy to identify the appropriate bonds and loans.	Noted.
GLOBAL WARNING	N/A	Noted.

Question 30: Do you agree that climate change should be captured in a forward-looking manner in the ORSA for market risk especially by incorporating a quantitative approach based on a standardised set of climate change scenarios?

Name of the organisation	Question 30:	If yes, which scenarios/tools could be used for quantitative assessments and which time s	p If no, please elaborate.	Response from EIOPA
SD-M GmbH	No		See above.	Noted. EIOPA phrased its opinion to reflect th forward looking element, qualitative and/or qu governance and ORSA. Proportionality
ClientEarth	n/a			Noted.
Financial Guard Ltd	Yes	See answers to Questions 2 and 3.		Noted.
German Insurance Association	No		We agree that climate change needs to be captured in a forward-looking manner. However, uniform requirements such as a standardised set of quantitative climate change scenarios for the ORSA contradict the basic idea of a company-specific risk and solvency assessment. Therefore each company should be able to decide for itself whether and, above all, how it will include sustainability risks in the ORSA. For the same reason and in line with our general remark no. 4, we would oppose compulsory capital add-ons for climate change risks. For further explanation we would like to refer to our answers on questions 3 and 4 above.	
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a			Noted.
FERMA - Federation of European Risk Management Associations	n/a			Noted.
German Association of Private Health Insurers (PKV)	n/a			Noted.
Allianz SE	No		Due to the long-term nature of climate change, this should be incorporated by qualitative analysis. See answers to question 4.	Noted.
Investment & Life Assurance Group	Yes	ILAG believes that it is most appropriate for firms to consider the effect of climate change (and other sustainability risks) within the ORSA. Many smaller insurers lack the resource or expertise to be able to consider a forward-looking climate change scenario to include in their ORSAs. To this end, a set of industry-accepted standardised scenarios will be useful (for example, see the climate change scenarios specified by the Prudential Regulation Authority in its 2019 stress test exercise). However, ILAG is concerned that the standardised scenarios may not be appropriate for all insurers, and requiring all firms to run all scenarios will not be proportionate.		Noted. EIOPA phrased its opinion to reflect th forward looking element, qualitative and/or qu governance and ORSA. Proportionality
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a			Noted.
Actuarial Association of Europe	n/a			Noted.
European Savings and Retail Banking Group	n/a			Noted.

the company specific nature of ORSA and at the same time have a quantitative, with respect to climate change in risk manangement,
the company specific nature of ORSA and at the same time have a quantitative, with respect to climate change in risk manangement,
the company specific nature of ORSA and at the same time have a quantitative, with respect to climate change in risk manangement,

number statementer group no production de la statementer de la					
Insurance Europe No The insurance sector believes that climate change considerations on market risk should be considered to prove the statistical instance and the provide statistical expensions on market risk should be considered quantitative scenarios would react a quantitative would react a quantitative scenarios would react a quantitative would react a quantitative would react a quantitative scenarios would react a quantitative would react a quantitative would react a quantitative would react a quantitative scenarios would react a quantitative scenarios would react a quantitative would rea	EIOPA insurance and re- insurance stakeholder group	No		climate-related financial risk into the yearly ORSA, in a forward-looking manner, the direct incorporation of a quantitative approach based on a mandatory and a standardised set of climate change scenarios would be inappropriate. Each company's ORSA and planning time horizons are unique. This is also true for a company's exposure to climate change and sustainability factors in general. For this reason, it is more natural for each company to focus on the impact of such factors on its profile based on general principles rather than on a prescribed set of scenarios with a prescribed time span. While it will be helpful to have access to a standardised set of quantitative scenarios, undertakings should be given sufficient flexibility to reflect their specific business models in their ORSA. Uniform requirements, e.g. a set of compulsory quantitative climate change scenarios for the ORSA, would be in contrast with the basic idea of a company- specific risk and solvency assessment. For this reason, such scenarios should remain flexible enough to allow each company to decide for itself how to	forward looking element, qualitative and/or qu
NoImage: Consideration on market ints thould be considered to gras a beyr are specific with afferences in the Disprict with a prescribed time span.Noted: EIOPA phrased its opinion to reflect if toward looking agement, sustainability rests to with a prescribed time span.Noted: EIOPA phrased its opinion to reflect if toward looking agement, sustainability rests to with a prescribed time span.Noted: EIOPA phrased its opinion to reflect if toward looking agement, sustainability rests to with a prescribed time span.Noted: EIOPA phrased its opinion to reflect if toward looking agement, sustainability rests to with a prescribed time span.Noted: EIOPA phrased its opinion to reflect if toward looking agement, sustainability rests to with a prescribed time span.Noted: EIOPA phrased its opinion to reflect if toward looking agement, sustainability rests in the source and DRSA. To the rescribed standardization with agement and consist or of with-defined scale.Noted: EIOPA phrased its opinion to reflect if toward looking agement, sustainability risks in their opould full weight be compared in sustainability risks in their one of the same base exert. If with the specific base rests to same base rest sustainability risks in their opould full weight be compared in the object bases meets of sustainability risks in their opould full weight be compared and consist.Noted: EIOPA phrased its opinion to reflect if toward looking approach should for the NFACAT modules. The same base is a currently the statamobility risks in their <br< td=""><td>Finance Watch</td><td>Yes</td><td>-</td><td></td><td>Noted.</td></br<>	Finance Watch	Yes	-		Noted.
Assuralia Yes would facilitate risk identification. The standardization would areate a level playing field. EIOPA could fully develop the scenarios with appropriate consultation with stakeholders. The scenarios should take into account the geographical specificities related to sustainability risk, as is currently the situation in the standard formula for the NATCAT modules. This is because the impact of climate change will differ across the geographical areas. EIOPA would monitor developments on sustainability trends and, if necessary, amend the stress test scenarios. Noted. EIOPA phrased its opinion to reflect the forward looking element, qualitative and/or quite governance and ORSA. However, in the NATCAT modules. Assuralia Yes Aside from this stress testing, undertakings could integrate optionally sustainability risks in their oRSA. Molece, CRSA, undertakings should maintain sufficient flexibility to reflect and integrate sustainability risks in line with their specific business model. In order to support the insurance sector, it will be helpful to have access to a standardized set of principles on market risk that allow each insure to decide how to incorporate sustainability risks in risk management, governance and ORSA, in line with the specific business profile. Sustainability risks can be considered both from a qualitative view. However, the time horizon of sustainability risks a outpany assesses in its ORSA based on its risk model. Therefore, sustainability risk a qualitative approach could be equally valuable to complement the ORSA. Sustainability risk conde to complement the ORSA analysis. Expected short-term of sustainability risk approach could be integrated in a more quantitative way in the ORSA.	Insurance Europe			considerations on market risk should be considered as long as they are expected to have a material impact on an insurer's balance sheet. However, the ORSA is company-specific with differences in time horizons and in exposures to sustainability factors. Standardised quantitative scenarios would be contrary to the objectives of the ORSA. It is key that each insurer remains free to decide whether and how to incorporate climate change considerations in its ORSA. For this reason, it is more natural for each company to focus on the impact of such factors on its profile based on general principles rather than on a prescribed standardised set of	Noted. EIOPA phrased its opinion to reflect th forward looking element, qualitative and/or qu governance and ORSA. Proportionality is gen
Caisse des Depôts Group n/a Noted.	Assuralia	Yes	 would facilitate risk identification. The standardization would create a level playing field. EIOPA could fully develop the scenarios with appropriate consultation with stakeholders. The scenarios need to be easy to implement and consist out of well-defined shocks. The scenarios should take into account the geographical specificities related to sustainability risk, as is currently the situation in the standard formula for the NATCAT modules. This is because the impact of climate change will differ across the geographical areas. EIOPA would monitor developments on sustainability trends and, if necessary, amend the stress test scenarios. Aside from this stress testing, undertakings could integrate optionally sustainability risks in their ORSA. However, in the ORSA, undertakings should maintain sufficient flexibility to reflect and integrate sustainability risks in line with their specific business model. In order to support the insurance sector, it will be helpful to have access to a standardized set of principles on market risk that allow each insurer to decide how to incorporate sustainability risks in risk management, governance and ORSA, in line with its specific business profile. Sustainability risks can be considered both from a qualitative and quantitative view. However, the time horizon of sustainability risks is much longer than the other risks a company assesses in its ORSA based on its risk model. Therefore, sustainability risks should not necessarily be considered from a quantitative approach. Given the horizon of sustainability risk, a qualitative approach could be equally valuable to complement the ORSA analysis. Expected short-term of 		forward looking element, qualitative and/or qu governance and ORSA. Proportionality is ger
	Caisse des Depôts Group	n/a			Noted.



	No	The projections done within the ORSA consider the business planning horizon which typically only extends to 3 to 5 years. However, climate change scenarios often present impacts on a longer time period. Furthermore, these scenarios consider many uncertainties. A standardised set of quantitative scenarios is contrary to the objectives of the ORSA; tt would not allow the assessment of the risk profile of individual insurers in an appropriate manner. In order to provide a level playing field for all insurers are maptropriate manner. In order to provide a level playing field for all insurers areance and ORSA. Proportionate change on the market risk module would be needed. In our view, a qualitative scenario/assessment of climate change on the market risk module would be very uncertain and would depend on a broad range of variables including the ability of the management of those companies which the insurer has invested in to adapt to climate to which innovation can be seen.
GLOBAL WARNING	n/a	Noted.

ct the company specific nature of ORSA and at the same time have a or quantitative, with respect to climate change in risk manangement, generally embedded in Solvency II and does also apply to any

Question 31: Do you agree that regular recalibration of the parameters for the natural catastrophe risk module of the standard formula will allow to capture climate related developments, including the impact of climate change?

Name of the organisation	Question	Please elaborate.	Response from EIOPA
SD-M GmbH	Yes	No comment.	Noted.
ClientEarth	n/a	-	Noted.
Financial Guard Ltd	Yes	NA	Noted.
German Insurance Association	Yes	As stated in the consultation paper the SCR calibration is designed to support risk assessment for the next 12 month. The calibration must be based on data of high quality, which can be ensured for historical data. A regular recalibration of the standard parameters is a reasonable measure to reflect the effect of climate change. However, it needs to be guaranteed that only validated data is used for the recalibration. It must be taken care to avoid unstable predictions and high volatility. The recalibration process should be transparent with respect to the data used and the methods ap- plied. As we expect changes due to climate developments to be slow and grad-ually, this can be captured by a regular recalibration of three to five years.	Noted.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	n/a	Noted.
FERMA - Federation of European Risk Management Associations	n/a	n/a	Noted.
German Association of Private Health Insurers (PKV)	n/a	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	Yes	Regularly reviewing the Solvency II calibration for continued appropriateness should be effective to avoid missing any quantifiable impact of climate change on the NatCat risk situation. The time horizon of Solvency II needs to be considered during this exercise.	Noted. The regular calibration has been m
Investment & Life Assurance Group	Yes	ILAG believes that, at this stage, climate change considerations belong in a firm's ORSA. □ ILAG notes that regular recalibration of the catastrophe risk module may lead to spurious volatility in firms' solvency capital ratios.□	Agreed. EIOPA also added in the opinion consider climate change-related risks in the frequent recalibration of the SCR parametropinion.
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a	-	Noted.
Actuarial Association of Europe	No	It is not clear that recalibration will involve an explicit allowance for climate change. In the absence of an explicit allowance for climate change then how could it be confirmed or denied that the standard formula captures climate related developments? Climate change will influence both the frequency and severities of claims. The relevant data needs to be monitored carefully. Changes should be reflected in the calibration of the standard formula by way of regular updates. However, such regular recalibration will need to allow not just for the updated data, but also to make appropriate adjustments for any climate related trends in the data. It may make sense to schedule recalibration to coincide with the IPCC's publication schedule, or related evolution in catastrophe modelling circles, rather than some fixed 3 to 5 years interval.	Partially agreed. EIOPA agrees with the fa apprpriate adjustment should be made for However, EIOPA does not think that it is re with the IPCC publication schedule as the nat cat models which do not necessarily for
European Savings and Retail Banking Group	n/a	-	Noted.

mentioned in the opinion.
·
n the fact that undertaling should
the ORSA. This issue with too
eters has also been mentioned in the
fact that during recalibration,
or any climate related trends.
relevant to coincide the recalibration
e recalibration currently considers only
follow the IPCC updates.

	n/a Yes	unstable predictions and high volatility are avoided. Historical data is most suited to ensure the fulfilment of these criteria. No views Yes, especially for hail and flood as these perils are sensitive to climate risk. We support a regular recalibration of these risks but they should be evaluated not more frequently than every 5-10 years. One should also consider whether all climate related risks are really captured by the perils which are identified in the Solvency II framework. As an example, forest fires are not individually captured as a natural catastrophe event, but implicitly included within the Man-made fire risk sub-module. We query whether the current design of this sub-module really captures the consequences of a forest fire in an appropriate manner.	Noted. Agreed. The comment whether all climate related risks are really the perils which are identified in the Solvency II framework has be the opinion.
Caisse des Depuis Group		unstable predictions and high volatility are avoided. Historical data is most suited to ensure the fulfilment of these criteria.	Noted
Caisse des Depôts Group		unstable predictions and high volatility are avoided. Historical data is most suited to ensure the	
Assuralia	Yes	Climate change does not happen as a sudden event, but it is expected to evolve over time. Recalibration of the standard parameters on a regular basis should aim at capturing climate related developments. Recalibration will allow to define more relevant parameters as models become more precise to estimate the impacts on the medium to short term. As stated in the consultation paper, the SCR calibration is designed to support risk assessment for a 12-month period. The recalibration process should be transparent with respect to the data used and the methods applied. It is key that only high-quality data is used for the recalibration so that	Agreed.
Insurance Europe	Yes	Climate change does not happen as a sudden event, but it is expected to evolve over time. Recalibration of the standard parameters on a regular basis should aim at capturing climate related developments. Recalibration will allow to define more relevant parameters as models become more precise to estimate the impacts on the medium to short term. As stated in the consultation paper, the SCR calibration is designed to support risk assessment for a 12-month period. The recalibration process should be transparent with respect to the data used and the methods applied. It is key that only high-quality data is used for the recalibration so that unstable predictions and high volatility are avoided. Historical data is most suited to ensure the fulfilment of these criteria.	Agreed.
Finance Watch	n/a		Noted.
Insurance stakeholder group	Yes	applied. Regular review of the Solvency II calibration for continued appropriateness should be effective to avoid missing any quantifiable impact of climate change on the NatCat risk situation. Calibration should only be amended based on statistically significant evidence that current risk factors are no longer applicable.	Agreed. EIOPA agrees with the point that calibration should only based on stasticalyy significant evidence that current risk factors applicable.

Question 32: Would you advise changing the design of the natural catastrophe risk module of the standard formula to capture climate related developments, including the impact of climate change?

Name of the organisation	Question 3	If yes, please provide an alternative method.	If no, please elaborate.	Response from EIOPA
SD-M GmbH	Yes	No comment.		Noted.
ClientEarth	n/a			Noted.
Financial Guard Ltd	n/a			Noted.
German Insurance Association	No		A change in the method is unnecessary from our point of view. All perils are included in the current design. However, whenever the recalibration of the parameter takes place, it is advisable to check the emergence of new risks that should be included.	Agreed. EIOPA has drawn simi conclusion in the natural catastrophe section of the opini
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a			Noted.
FERMA - Federation of European Risk Management Associations	n/a			Noted.
German Association of Private Health Insurers (PKV)	n/a			Noted.
Allianz SE	No		Calibration of factors is sufficient.	Agreed. EIOPA has drawn simi conclusion in the natural catastrophe section of the opini
Investment & Life Assurance Group	No		ILAG has no view.	Noted.
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a			Noted.
Actuarial Association of Europe	No		not at this stage. In principle, the Standard Formula structure can allow for the main types of risks. Based on currently available data, recalibration rather than re- design seems to be a reasonable first step for now.	Agreed. EIOPA has drawn simi conclusion in the natural catastrophe section of the opini
European Savings and Retail Banking Group	n/a			Noted.
EIOPA insurance and re- insurance stakeholder group	No		Regular recalibration of natural catastrophe risk parameters using recent data will capture climate related developments sufficiently well since they are gradual changes that occur over a long-time horizon. Therefore, we are sceptical about changing the design of the natural catastrophe risk module of the standard formula.	Agreed. EIOPA has drawn simi conclusion in the natural catastrophe section of the opini
Finance Watch	n/a	l		Noted.
Insurance Europe	No		Regular recalibration of natural catastrophe risk parameters using recent data will capture climate related developments sufficiently well since they are gradual changes that occur over a long-time horizon. Furthermore, all perils are included in the current design. Therefore, the insurance sector is sceptical about changing the design of the natural catastrophe risk module of the standard formula. However, whenever the recalibration of the parameter takes place, it is advisable to check the emergence of new risks that should be included.	Agreed. EIOPA has drawn simi conclusion in the natural catastrophe section of the opini



Assuralia	No		Regular recalibration of natural catastrophe risk parameters using recent data will capture climate related developments sufficiently well since they are gradual changes that occur over a long-time horizon. Therefore, the insurance sector is sceptical about changing the design of the natural catastrophe risk module of the standard formula.	Agreed. EIOPA has drawn simil conclusion in the natural catastrophe section of the opini
Caisse des Depôts Group	n/a			Noted.
AMICE	Yes	In our view a regular recalibration should be sufficient. However, this new calibration should avoid huge changes in parameters from one year to another. Indeed, undertakings develop business plans considering also the absorption of capital requirement and they do not want a great volatility due to regulatory modifications. See also answer to question 31.		Agreed. EIOPA has drawn simil conclusion in the natural catastrophe section of the opini
GLOBAL WARNING	n/a			Noted.

nilar	
nion.	
nilar	
nion.	

Question 33: Do you agree that climate change should be captured in a forward-looking manner in the ORSA for natural catastrophe underwriting risk especially by incorporating a quantitative approach based on a standardised set of climate change scenarios?

Name of the organisation	Question 33	f yes, which scenarios/tools could be used for quantitative assessments and which tim If no, please elaborate.	F
SD-M GmbH	No	See above.	Ν
ClientEarth	n/a		Ν
Financial Guard Ltd	n/a		١
German Insurance Association	No	 We agree that climate change needs to be captured in a forward-looking manner. However, uniform requirements such as standardised set of quantitative climate change scenarios for the ORSA contradict the basic idea of a company-specific risk and solvency assessment. Therefore each company should be able to decide for itself whether and, above all, how it will include sustainability risks in the ORSA. For the same reason and in line with our general remark no. 4, we would oppose compulsory capital add-ons for climate change risks. For further explanation we would like to refer to our answers on questions 3 and 4 above. Additionally we expect that in the pricing of underwriting risk a forward looking view is already widely in place. Many products are repriced on an annual basis. A long term view in reserving is market standard. If climate change is expected to be a major risk keyond these areas, it is to be captured unalitatively in the ORSA. But the question whether climate risk is a major risk keyond these areas, it is to be captured quantitative jin the ORSA. But the question whether climate risk is a major risk cannot be answered in dividually by each undertaking. For an undertaking with one-year contracts, short settlement periods and extensive reinsurance cover the risk is rather small and thus an explicit and quantitative climate risk is tension related substance. 	N r c c t r H F u
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a		٢
FERMA - Federation of European Risk Management Associations	n/a		N
German Association of Private Health Insurers (PKV)	n/a		٢
Allianz SE	No	See answer to question 4.	١
Investment & Life Assurance Group	n/a		٢
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a		٢

	Response from EIOPA
	Noted.
	Noted.
	Noted.
it	Noted. EIOPA is of the opinion that further work is needed to define a consistent set of help undertakings define quantitative parameters that could be used in climate change-related scenarios that insurers can then adopt as appropriate consider in their ORSA, risk management and, governance practices and ORSA. However, EIOPA also recognises that other parameters will depend on the specificities of each undertaking.
	Noted.

		-		_
Actuarial Association of Europe	Yes	We agree that climate change should be captured in a forward-looking manner in the ORSA for natural catastrophe underwriting. However, we caution against the use of standardised scenarios within the ORSA as discussed in our response to Q4. Regulators could instead assess the impacts of climate scenarios by applying standardised climate stress tests outside the ORSA process. The scenarios should be selected based on a review of the IPCC's work schedule. Efforts should be made to align with the IPCC's work schedule so that standardised climate change scenarios are quickly refreshed in step with new publications from the IPCC The consultation paper notes (in paragraphs 6.8 and 9.73) that, "Sustainability developments, and in particular climate change risks, are expected to materialise over the next 10 to 20 years." However, the precise timeframe for irreversible tipping points related to sustainability risks, and in particular climate change risks, is uncertain. Therefore, both short-term step-change and long-term scenarios should be assessed for Natural Catastrophe risks. Finally, any new requirements, relating to the use of specific catastrophe models, or to additional reporting and/or stress-testing, should be subject to the principle of proportionality.		r
European Savings and Retail Banking Group	n/a			٢
EIOPA insurance and re- insurance stakeholder group	No		Even though it is of utmost importance to integrate climate- related financial risk into the yearly ORSA in a forward- looking manner, e.g. considerations on natural catastrophe risk in relation to climate changes, we find it reasonable only as long as these risks are expected to have a material impact on an insurer's balance sheet. However, in line with the response to question 31, we note that each ORSA is company-specific with differences in time horizons and exposures to sustainability factors. As finding a meaningful standardised set of quantitative scenarios might be difficult, we suggest EIOPA should focus on the development of general principles rather than a prescribed set of quantitative scenarios. It is key that there is flexibility on how each company integrates sustainability risks in its ORSA. This considered, a standardized set of climate change scenarios would help companies to better integrate climate change development related to natural catastrophe risk. For instance, the impact of climate change on storms depends on the scenario. Therefore, a standardised set of climate change scenario would be useful as long as each insurer has flexibility to decide whether and how to incorporate a climate scenarios/tools in its ORSA.	۲ r c c t r F t
Finance Watch	Yes			Ļ

Noted. Noted.		
Noted. EIOPA is of the opinion that further work is needed to define a consistent set of help undertakings define quantitative parameters that could be used in climate change-related scenarios that insurers can then adopt as appropriate consider in their ORSA, risk management and, governance practices and ORSA. However, EIOPA also recognises that other parameters will depend on the specificities of each undertaking.		Noted.
needed to define a consistent set of help undertakings define quantitative parameters that could be used in climate change-related scenarios that insurers can then adopt as appropriate consider in their ORSA, risk management and, governance practices and ORSA. However, EIOPA also recognises that other parameters will depend on the specificities of each undertaking.		Noted.
Noted.	S	needed to define a consistent set of help undertakings define quantitative parameters that could be used in climate change-related scenarios that insurers can then adopt as appropriate consider in their ORSA, risk management and, governance practices and ORSA. However, EIOPA also recognises that other parameters will depend on the specificities of each undertaking.
		Noted.

Insurance Europe	No		The insurance sector finds it reasonable to address considerations on natural catastrophe risk in relation to climate changes in the ORSA, provided they are expected to have a material impact on an insurer's balance sheet. However, in line with the response to question 31, the insurance sector notes that each ORSA is company-specific with differences in time horizons and exposures to sustainability factors. As finding a meaningful standardised set of quantitative scenarios might be difficult, the insurance sector suggests EIOPA to focus on the development of non-binding qualitative principles rather than a prescribed set of quantitative scenarios. It is key that there is flexibility on how each company integrates sustainability risks in its ORSA.
Assuralia	Yes	The forward-looking approach should focus on stress testing. Stress testing at European level would facilitate risk identification. The standardization would create a level playing field. EIOPA could fully develop the scenarios with appropriate consultation with stakeholders. The scenarios need to be easy to implement and consist out of well-defined shocks. The scenarios should take into account the geographical specificities related to sustainability risk, as is currently the situation in the standard formula for the NATCAT modules. This is because the impact of climate change will differ across the geographical areas. EIOPA would monitor developments on sustainability trends and, if necessary, amend the stress test scenarios. Aside from this stress testing, undertakings could integrate optionally sustainability risks in their ORSA. However, in the ORSA, undertakings should maintain sufficient flexibility to reflect and integrate sustainability risks in line with their specific business model. In order to support the insurance sector, it will be helpful to have access to a standardized set of principles on NATCAT underwriting risk that allow each insurer to decide how to incorporate sustainability risks in risk management, governance and ORSA, in line with its specific business profile. Sustainability risks can be considered both from a qualitative and quantitative view. However, the time horizon of sustainability risks is much longer than the other risks a company assesses in its ORSA based on its risk model. Therefore, sustainability risks should not necessarily be considered from a quantitative approach. Given the horizon of sustainability risk, a qualitative approach could be equally valuable to complement the ORSA.	
Caisse des Depôts Group	n/a		
AMICE GLOBAL WARNING	No n/a		No, we do not agree. In our view a qualitative scenario would be more coherent as the time horizon of climate change is too long to be able to produce a quantitative scenario which is reliable and therefore useful. Nowadays there is significant uncertainty concerning possible scenarios which must be included in insurers' analyses; for this reason, EIOPA should define the macro – areas on which stresses have to be applied and give undertakings guidelines to develop a quantitative framework.

Noted. This has been considered in the opinion.

Noted.

Noted. EIOPA is of the opinion that further work is needed to define a consistent set of help undertakings define quantitative parameters that could be used in climate change-related scenarios that insurers can then adopt as appropriate consider in their ORSA, risk management and, governance practices and ORSA. However, EIOPA also recognises that other parameters will depend on the specificities of each undertaking.

Noted.

Question 34: How do you take into account the long term view of climate-related developments, including the impact of climate change for the management of your natural catastrophe risks?

	Question 24. How do you take into account the long term view of alignets related	ſ
Name of the organisation	Question 34: How do you take into account the long term view of climate-related developments, including the impact of climate change for the management of your natural catastrophe risks?	Response from EIOPA
SD-M GmbH	•	Noted.
ClientEarth		Noted.
Financial Guard Ltd		Noted.
German Insurance Association	Long term developments caused by climate change are taken into account for short-term contracts with short settlement-periods as necessary. The short time span of these contracts limits the	Noted. This has been mentioned in the opinion.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	Noted.
FERMA - Federation of European Risk Management Associations	n/a	Noted.
German Association of Private Health Insurers (PKV)	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	The long term impact of climate change is evaluated mainly by stress test scenarios and sensitivity analyses for informational purposes and for strategic business decisions.	Noted.
Investment & Life Assurance		Noted.
Group	No response.	
Vienna Insurance Group AG Wiener Versicherung Gruppe	-	Noted.
Actuarial Association of Europe	n/a	Noted.
European Savings and Retail Banking Group	-	Noted.
EIOPA insurance and re- insurance stakeholder group	no comments	Noted.
Finance Watch	-	Noted.
Insurance Europe		Noted.
Assuralia		Noted.
Caisse des Depôts Group		Noted.
AMICE	Climate-related developments can be seen from a short-term and long-term perspective. For the short-term the impact would be analysed on an annual basis at least in order to assess the appropriateness of any reinsurance cover and whether the terms and conditions and the calibration are still appropriate. Following any natural catastrophe event, the event is analysed and assessed against the various models used. Where deemed appropriate the additional measures are taken by de AMSB and the actuarial function holder will address this in their annual reporting. For the longer term, the climate risks are assessed in the context of the Product and Review Procedure (PARP) and the ORSA. We query how non-life insurers can help in preventing the effects of climate change in relation to the insurance cover and minimizing any damages from a climate related event. Natural catastrophe risk is also considered from the perspective of the policyholder. See the answer to question 23 regarding risk mitigation techniques	Noted.
GLOBAL WARNING		Noted.

Question 35: Do you agree the rules relating to internal model design and calibrations do not prevent internal model undertakings from accounting for sustainability factors, with particular regard to the climate risk that existing insurance and reinsuranc

Name of the organisation	Question	Please elaborate.	Response from EIOPA
SD-M GmbH	No	No comment.	Noted.
ClientEarth	n/a	-	Noted.
Financial Guard Ltd		NA	Noted.
German Insurance Association	Yes	Yes, we agree that internal model design and calibrations do not prevent internal model undertakings from accounting for sustainability factors of the climate related risk that they are exposed to. In fact, some insurers take into account the climate-related evolution of some variable included in the internal models, e.g. pandemics evolution in the calculation of their provisions.	Noted.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	n/a	Noted.
FERMA - Federation of European Risk Management Associations	n/a	n/a	Noted.
German Association of Private Health Insurers (PKV)	n/a	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
Allianz SE	Yes	We agree.	Noted.
Investment & Life Assurance Group	Yes	ILAG agrees that the rules relating to internal model design and calibration offer sufficient flexibility to incorporate climate sustainability factors. ILAG notes that changing the model design can be onerous, if it requires regulatory approval, but that the calibrations themselves should offer sufficient flexibility to incorporate sustainability factors appropriate to each insurer's exposures.	Noted.
Vienna Insurance Group AG Wiener Versicherung Gruppe	n/a	-	Noted.
Actuarial Association of Europe	Yes	The rules relating to internal models do not prevent undertakings from accounting for sustainability risk. On the contrary, they require a consideration as soon as climate change related risks are material for the undertaking. The approval of any future models should be subject to the model having allowed appropriately for sustainability/climate risk-factors. To the extent existing internal model users may wish to develop their own climate change models tailored to their own risk profiles then an approval process should be required.	Noted.
European Savings and Retail Banking Group	n/a	-	Noted.
EIOPA insurance and re- insurance stakeholder group	Yes	We agree that internal model design and calibrations do not prevent internal model undertakings from accounting for sustainability factors of the climate related risk that they are exposed to. In fact, some insurers take into account the climate-related evolution of some variable included in the internal models, eg pandemics evolution in the calculation of their provisions.	Noted.
Finance Watch	Yes	Yes, but there are serious reservations over the use of internal models that should enter into consideration here. The ESRB has identified a need for better monitoring and assessment of internal models, which could help give a view on any possible good or bad current practices arising from the use of internal models in this area. See ESRB, 'Macroprudential provisions, measures and instruments for insurance', November 2018.□ Ultimately the use of internal models is, however, not an appropriate instrument of prudential regulation. The only acceptable model should be a standardised approach that allows at least a minimum level of comparability, rather than attempting to standardise some minimal elements around internal models.	Noted.

Insurance Europe	Yes	The insurance sector agrees that internal model design and calibrations do not prevent internal model undertakings from accounting for sustainability factors of the climate related risk that they are exposed to. In fact, some insurers take into account the climate-related evolution of some variable included in the internal models, eg pandemics evolution in the calculation of their provisions. Additionally, lack of experience and largely unclear trends make parameterization of the climate risk extremely challenging.	Noted.
Assuralia	Yes	The insurance sector agrees that internal model design and calibrations do not prevent internal model undertakings from accounting for sustainability factors of the climate related risk that they are exposed to. In fact, some insurers take into account the climate-related evolution of some variable included in the internal models, e.g. pandemics evolution in the calculation of their provisions.	Noted.
Caisse des Depôts Group	n/a	No views	Noted.
AMICE	Yes	Yes, we agree that the rules do not prevent these factors.	Noted.
GLOBAL WARNING	n/a	N/A	Noted.

Question 36: Could you provide further explanation/examples on how sustainability factors, with particular regard to the climate-change risks are taken into account in your internal model?

	Question 36: Could you provide further explanation/examples on how sustainability factors,	
	with particular regard to the climate-change risks are taken into account in your internal	Response from EIOPA
Name of the organisation	model?	
SD-M GmbH	No comment.	Noted.
ClientEarth	-	Noted.
Financial Guard Ltd	NA	Noted.
German Insurance Association	One way to incorporate climate change in the models is to consider the long-term trend in temperature to obtain a forecast on this/ next year's expected temperature and its distribution. This is especially the case for hazards that are highly temperature-dependent. Examples include forest fires, but also tropical cyclones, especially when considering precipitation and storm surge (via sea levels). However, as this a company specific question, we cannot give an answer for the German insurance industry.	Noted.
Association of German Public Insurers - Verband öffentlicher Versicherer (VöV)	n/a	Noted.
FERMA - Federation of European Risk Management Associations	n/a	Noted.
German Association of Private Health Insurers (PKV)	Regarding this question we would like to refer to the statement filed by the German Insurance Association (GDV) which is supported by us.	Noted.
See general remarks to question 1, which are relevant also for a situation where the SCR is calculated using an internal model. In addition the internal model reflects the risk of adverse developments in the next 12 month. For natural catastrophes we use complex scientific models that take the most recent information on trends into account. Please note that climate change is a more long term view and not something that will occur in the next 12 month, where the embedded volatility of natural catastrophes is the driving factor.		Noted.
Investment & Life Assurance		Noted.
Group	N/a	
Vienna Insurance Group AG Wiener Versicherung Gruppe	-	Noted.
Actuarial Association of Europe	As an actuarial association, we do not own any internal model. Existing internal models consider climate change in particular: -Through the use of catastrophe models (RMS, AIR, Equecat) which commonly include climate change in their calibration (whether as base calibration or as an option). -Regarding pricing risk, by taking into account trends in frequencies and severities of claims -Regarding reserving risks, climate change generate instabilities in pattern development and thus are taken into account in the calibration (typically bootstrap or Merz-Wuthrich) Regarding market risks, the current scientific literature does not allow to calibrate a specific volatility stemming from climate change. Actuaries should work in order to get a better understanding of this topic.	Noted.
European Savings and Retail Banking Group	-	Noted.
EIOPA insurance and re- insurance stakeholder group	No comments	Noted.
mourance stakenoluer group		Noted.
Finance Watch	-	
	-	
Finance Watch Insurance Europe Assuralia	- - /	Noted. Noted.

GLOBAL WARNING	N/A	Noted.
	the damage from a severe hailstorm would increase because of this. In practice, it is the opposite as replacing a solar panel is less costly than repairing a damaged rooftop. However, a badly installed solar panel increases the risk of fire. We believe that any spotted trend needs to be analysed before any decisive changes are introduced in the modelling and calibration of an internal model.	Noted.
	See answer to question 35.	

