

# Open Public Consultation for the new European climate resilience framework

Fields marked with \* are mandatory.

## Disclaimer

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This document is not an official European Commission document nor reflects an official European Commission position. Nothing in this document commits the European Commission nor does it preclude any policy outcomes.

## Introduction

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### **Consent and how to complete this survey**

The European Commission will protect any personal data you provide during this consultation.

You can save your replies as a draft and return later to complete the survey.

Some questions are mandatory, especially at the start, while others in thematic sections are optional – answer only those relevant to you.

Please keep free text comments concise.

At the end of the questionnaire, you may upload a document with further comments and views.

For reasons of transparency, organisations and businesses taking part in public consultations of the European Commission are asked to register in the EU's Transparency Register. If already registered, you can skip this step.

Thank you for your contribution!

### **Introduction**

In recent years, Europe has been facing growing damages and costs from climate-related weather extremes. How we act on climate change will shape Europe's future competitiveness, security and prosperity. How we adapt and build climate resilience and preparedness now will determine our quality of life for years to come.

The European Climate Risk Assessment identified 36 key climate risks in Europe that interact to result in fundamental system-wide challenges. If climate change, along with other risk factors, is not properly addressed, it can compromise food and water security, energy and defence capabilities, supply chains, pricing, economic and financial stability, fiscal sustainability and public health more severely. In turn, this affects social cohesion and stability, with vulnerable groups particularly affected.

The assessment also found that European economy and society are not sufficiently prepared for current and future climate risks, with several risks already at critical levels. Without urgent action to cut emissions and build climate resilience, many risks could reach catastrophic levels by the end of this century. Hundreds of thousands of people could lose their lives to heatwaves, and economic losses from coastal floods alone could exceed EUR 1 trillion per year.

Responding to these challenges and in line with the Commission President's Political Guidelines, the Commission is preparing a new and impactful European integrated framework for climate resilience scheduled for adoption in Q4-2026.

Its key objective is to drive transformational change to make Europe significantly better prepared for and more resilient to climate impacts. The new framework will empower all stakeholders to gain control in the increasingly uncertain future, manage climate risks more effectively, seize emerging economic opportunities, and strengthen the EU's position as a global leader in producing and exporting climate resilience technologies, products, services and innovations.

The objectives of the framework include:

- protecting people's health, well-being and livelihoods;
- anticipating and significantly reducing exposure to high-impact risks and losses when conceiving policies, investments and other measures;
- ensuring robust and regular science-based risk assessments as basis for action;
- promoting a shared understanding of future climate conditions among decision-makers in Europe;
- supporting EU Member States, EU candidate countries and the EU neighbourhood – including the regional and local levels – while empowering their societies;
- promoting coordinated and effective action across all levels of government and the private sector;
- and reducing losses, destruction and costs from climate-related impacts by increasing (re)insurance cover.

An open call for evidence was held over the summer. Respondents broadly agreed with the Commission's analysis of the key problems: EU and national policy frameworks for climate resilience are inadequate, missing in many sectors, or poorly implemented. The feedback also showed that regional and local authorities, businesses, households and individuals are not sufficiently aware of climate risks, which significantly limits their preparedness.

As a result, respondents expressed strong support for robust action in this area. They most often called for: (i)

integration of 'resilience-by-design' criteria into all public spending, procurement and key sectoral policies; (ii) harmonised risk-assessment standards with shared climate scenarios; (iii) nature-based solutions as default first line of defence; (iv) stable long-term funding for adaptation and resilience; and (v) a systematic integration of climate-related health considerations.

This open public consultation, building on the call for bold and urgent action, offers all interested parties the opportunity to provide feedback on the proposed aspects of the new EU framework for climate resilience, and to share any additional views and suggestions.

## About you

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### \* Language of my contribution

- ☐ Bulgarian
- ☐ Croatian
- ☐ Czech
- ☐ Danish
- ☐ Dutch
- ☒ English
- ☐ Estonian
- ☐ Finnish
- ☐ French
- ☐ German
- ☐ Greek
- ☐ Hungarian
- ☐ Irish
- ☐ Italian
- ☐ Latvian
- ☐ Lithuanian
- ☐ Maltese
- ☐ Polish
- ☐ Portuguese
- ☐ Romanian
- ☐ Slovak
- ☐ Slovenian

- ☐ Spanish
- ☐ Swedish

\* I am giving my contribution as

- ☐ Academic/research institution
- ☐ Business association
- ☐ Company/business
- ☐ Consumer organisation
- ☐ EU citizen
- ☐ Environmental organisation
- ☐ Non-EU citizen
- ☐ Non-governmental organisation (NGO)
- ☐ Public authority
- ☐ Trade union
- ☒ Other

\* First name

Stephanos

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\* Organisation name

*255 character(s) maximum*

Actuarial Association of Europe

\* Organisation size

- ☐ Micro (1 to 9 employees)
- ☐ Small (10 to 49 employees)

- ☐ Medium (50 to 249 employees)
- ☒ Large (250 or more)

## Transparency register number

Check if your organisation is on the transparency register. It's a voluntary database for organisations seeking to influence EU decision-making.

550855911144-54

## \*Country of origin

Please add your country of origin, or that of your organisation.

*This list does not represent the official position of the European institutions with regard to the legal status or policy of the entities mentioned. It is a harmonisation of often divergent lists and practices.*

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<input type="radio"/> Czechia	<input type="radio"/> Lebanon	<input type="radio"/> Saint Helena Ascension and Tristan da Cunha	<input type="radio"/> Zambia

- ☐ Democratic Republic of the Congo
- ☐ Lesotho
- ☐ Saint Kitts and Nevis
- ☐ Zimbabwe
- ☐ Denmark
- ☐ Liberia
- ☐ Saint Lucia

Fields of activity:

- ☐ Agriculture
- ☐ Forestry and fishing
- ☐ Mining and quarrying
- ☐ Manufacturing
- ☐ Energy
- ☐ Water and waste
- ☐ Construction and real estate
- ☐ Wholesale and retail trade
- ☐ Hotel
- ☐ Food services
- ☐ Publishing
- ☐ Broadcasting
- ☐ Content production and distribution
- ☐ Telecommunication
- ☐ IT
- ☐ Computing
- ☒ Financial and insurance
- ☐ Public administration
- ☐ Defense and security
- ☐ Education and training
- ☐ Research
- ☐ Health, care and social services
- ☐ Arts, sports and recreation
- ☐ Biodiversity and nature protection
- ☐ Climate mitigation and adaptation
- ☐ Other



The Commission will publish all contributions to this public consultation. You can choose whether you would prefer to have your details published or to remain anonymous when your contribution is published. **For the purpose of transparency, the type of respondent (for example, 'business association', 'consumer association', 'EU citizen') country of origin, organisation name and size, and its transparency register number, are always published. Your e-mail address will never be published.** Opt in to select the privacy option that best suits you. Privacy options default based on the type of respondent selected

### \* Contribution publication privacy settings

The Commission will publish the responses to this public consultation. You can choose whether you would like your details to be made public or to remain anonymous.

#### ☐ Anonymous

Only organisation details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published as received. Your name will not be published. Please do not include any personal data in the contribution itself if you want to remain anonymous.

#### ☒ Public

Organisation details and respondent details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published. Your name will also be published.

☒ I agree with the [personal data protection provisions](#)

## General Questions

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How well informed do you consider yourself about the potential impacts of climate change that could affect you now and in the future?

	Fully informed	Slightly informed	Neutral	Slightly uninformed	Totally uninformed
* Answer	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Optional: Please explain why?

The AAE considers itself slightly to fully informed regarding the systemic drivers and high-level financial impacts of climate change. However, we emphasize that "full information" in an actuarial context must account for the inherent tail-risk extreme but plausible loss scenarios and stochastic nature of climate projections. While the scientific consensus on aggregate risk is clear, significant challenges remain in the granular translation of these risks into specific, time-bound financial impacts. Acknowledge that "informed" also implies a recognition of the limits of current modeling in the face of non-linear climate tipping points.

How prepared do you consider yourself to face the potential impacts of climate change?

	Fully prepared	Slightly prepared	Neutral	Slightly unprepared	Totally unprepared
* Answer	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Optional: Please explain why?

Our preparedness (as a profession) is advanced in terms of risk identification and modeling capabilities; however, it remains "neutral" due to the lack of harmonized European standards for underwriting sustainability and specific technical guidance for integrating long-term climate trajectories into short-term solvency frameworks within existing prudential constraints. True preparedness in the financial sector requires a shift from reactive risk management to proactive resilience-by-design, which is currently hindered by the absence of coordinated cross-sectoral policy frameworks.

Who do you consider to be primarily responsible for preparing for the physical impacts of climate change?

- ☐ Individual citizens
- ☐ Businesses and private actors
- ☐ Local and regional authorities
- ☐ National governments
- ☐ The European Union
- ☒ All of the above
- ☐ other

Which of the following would help you become better prepared for the impacts of climate change?

- ☒ Easier access to data and information relevant to my area/situation
- ☒ Expert support to prepare/protect my home/family/company etc. against possible risks, based on this data/information
- ☒ Easier access to funding or financing for my/our actions

- ☒ Greater local ownership of planning, implementing measures, and monitoring success
- ☒ Better planning and preparation by public authorities
- ☒ Other

If other, please explain why?

Actuaries require high-resolution, open-access climate data to develop more accurate parametric triggers and risk models. Improved public planning provides the "certainty" needed for long-term private investment in resilience.

Please name the three policy actions that would most help you improve your risk awareness and preparedness for climate change impacts:

1. Establishment of an Open-Access, Geographically Granular Climate Risk Database: To allow for the accurate pricing of risk and the development of innovative insurance solutions. Losses and damages could also be included in this database.
2. Harmonised "Resilience-by-Design" Standards: Embedding climate risk assessments into all public and private investment decisions to ensure long-term fiscal sustainability.
3. Predictable Financial Incentives for Adaptation: Utilising tax incentives and grants to lower the cost of capital for resilience projects, particularly for SMEs and vulnerable sectors.

## Climate resilience by design

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The principle of 'climate resilience by design' means a **proactive effort to consider and prevent plausible high-impact risks and losses from the very beginning when conceiving policies, investments and other measures**. The 2024 Commission Communication on managing climate risks put it simply: 'planning decisions of today need to build on a sound anticipatory assessment of risks' likely to occur in the future. Climate resilience by design differs from measures taken to remedy the damage caused by climate impacts after they have already occurred.

**The Commission intends to ensure that the future climatic conditions are duly integrated into all relevant EU policies and frameworks governing sectors and stakeholders vulnerable to climate change.** It also seeks to encourage Member States and all public-sector authorities and private-sector stakeholders to embed this principle in their decisions, ensuring coordinated action across society.

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Which sectors are most important for integrating the principle of "climate resilience by design"?

Financial and Insurance, Energy, Water Management, Construction & Infrastructure, and Agriculture.

As actuaries, our interest in these sectors is strictly limited to their impact on the quantifiability, insurability, and long-term financial stability of the risks involved.

Which policy areas or EU legislative frameworks should prioritise embedding this principle, and how should this be done?

- 1) Financial and Insurance Regulation: We must align risk assessments, capital allocation frameworks, and disclosure requirements with harmonised EU climate scenarios. This ensures that the financial sector can accurately price and manage the tail-risk associated with long-term climate trajectories.
- 2) Infrastructure and Energy Legislation: Regulations must mandate that long-lived assets (energy, transport, and critical infrastructure) are designed for 2050+ climate conditions to avoid stranded assets and service disruptions.
- 3) Spatial Planning and Building Codes: Minimum EU-wide standards for climate-resilient construction. This includes strict regulations on construction materials, the promotion of "sponge cities," and the strategic removal of built-up areas in high-exposure zones (e.g., floodplains).
- 4) Environmental and Agricultural Policy: The Common Agricultural Policy (CAP) and water legislation should prioritise nature-based solutions as a primary defense mechanism, reducing the overall volatility of agricultural losses.

Are there any existing policies or legislation (at EU, Member State, regional, local level) that prevent you from taking effective action to be better prepared for the impacts of climate change? If so, which ones and please explain how they impair your efforts.

Regulatory Instability and Rollbacks: Frequent changes to regulatory instability in disclosure, transition-plan and due-diligence requirements (e.g., in the Omnibus package) could weaken the information base necessary for actuaries to perform robust climate-risk assessments. A lack of policy visibility prevents the long-term underwriting sustainability required for this challenge.

State-Aid and Fiscal Constraints: Existing State-aid rules often prioritise short-term efficiency, which can constrain preventive public investment in climate resilience. Investments with high upfront costs and diffuse, long-term benefits may fail current eligibility criteria, despite their ability to significantly reduce future fiscal exposure and tail-risk.

Structural Inconsistencies: Fragmented land-use and building regulations remain misaligned with projected climate conditions, effectively "locking in" future vulnerabilities. Furthermore, competition rules may inadvertently discourage the collective planning necessary for industry-wide adaptation.

The Moral Hazard Problem: Existing disaster-relief frameworks, if not properly balanced with insurance requirements, can create moral hazard, reducing the incentive for private actors to invest in autonomous adaptation measures.

Sectoral Integration Gap: A lack of clear climate-risk obligations in sectoral legislation (energy, transport, agriculture) prevents a holistic view of systemic risk, complicating the actuarial task of cross-sectoral risk modeling.

## Legislative framework for climate resilience

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The European Climate Law requires the EU and Member States to ensure continuous progress on climate adaptation. Yet, Member States have very different policy frameworks for the assessments, strategies, plans and instruments, which limits the development of a shared understanding of the challenges and coordinated climate resilience actions across the EU. Policies are often not specific enough to address major climate risks, and the roles and responsibilities of individual sectors in adaptation planning and implementation vary widely.

Overall, **progress in strengthening climate resilience in the EU is slow and uneven and is not keeping pace with accelerating climate change. EU and national resilience policies and measures are currently not fit for purpose.**

Therefore, the Commission intends to prepare a legislative proposal to ensure a more comprehensive, robust and ambitious approach, while fully respecting the principle of subsidiarity, proportionality, avoiding unnecessary administrative burdens and ensuring coherence with sectoral policies. This section invites your views on the scope and key elements of the planned proposal.

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**The Commission considers that including the below aspects and requirements in its legislative proposal is essential to better prepare our economies and societies for climate change, and to prevent major losses and damage. What is your view on each of them?**

Common baseline climate trajectories/scenarios, and acceptable risk levels:

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
<p>Determination of the levels of global warming or a similar common baseline* for adaptation decisions that EU and national public policy and investments should consider, for example through common EU climate reference trajectories/scenario(s)</p> <p><i>* An example is the decision by France to establish a Reference Trajectory for Adaptation to Climate Change (TRACC), setting +1.5 °C by 2030, +2 °C by 2050, and +3 °C by 2100 as reference for national and regional adaptation strategies. Respondents to the Call for Evidence supported the development of minimum precautionary levels for climate resilience / common reference scenarios / reference warming trajectories.</i></p>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Duty to consider a common baseline (e.g. reference trajectories/scenarios) of global warming, as described in the preceding bullet point, in climate risk assessments.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Duty to apply a precautionary approach by integrating a common baseline into planning decisions by the EU and Member States	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Common approach for deciding what level of residual risks society / public authorities choose not to eliminate: a way to determine what are we willing to live with and why	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Comments:

A common baseline and approach will be beneficial as far as it covers differences by EU region and natural perils appropriately. A harmonised set of EU climate-risk scenarios and acceptable risk levels is essential to ensure coherent planning, reduce uncertainty for public and private actors, and avoid the systematic underestimation of risks. Common baselines will help align adaptation decisions across Member States and sectors and support a precautionary, science-based approach.

Furthermore, a harmonised set of EU-wide climate-risk scenarios would be highly beneficial for any EU-level risk pooling, as it would reduce modelling uncertainty, improve comparability, and support more transparent and stable risk-sharing across Member States. We acknowledge that more research is needed with respect to the probability distributions of climate-risk scenarios.

## Climate risk assessments:

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
Development of climate risk assessments that would also cover the most affected policy sectors, at European level	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Development of climate risk assessments that would also cover the most affected policy sectors, at national level	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Common parameters for the scope and content of both EU and national climate risk assessments (e.g. climate scenarios, regularity, sector coverage)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Comments:

Harmonised EU parameters, common baselines, and regular updates are essential to ensure comparability, avoid the systematic underestimation of risks, and support precautionary, science-based decision-making across all Member States. These developments will be effective as long as they appropriately cover the differences by EU regions and natural perils.

From an actuarial perspective, a comprehensive state-level assessment approach is a positive development, provided it avoids simplistic assumptions. To ensure underwriting sustainability and protect fiscal sustainability, climate-risk assessments must be grounded in realistic warming trajectories rather than optimistic assumptions—for instance, planning for +4 Celsius conditions. To manage tail-risk effectively, EU and national assessments should incorporate potential tipping points, non-linear impacts, and exponential damage dynamics that are not captured by linear models or median-scenario planning. While common parameters are beneficial for capital allocation and comparability, we note that they must be flexible enough to remain useful across diverse geographical contexts, otherwise, overly rigid parameters may lose their utility.

## Adaptation planning and determination of risk owners:

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
Definition of climate resilience and adaptation targets (possibly including sectoral / thematic targets) for EU institutions and Member States	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Robust obligation on the EU/Commission to prepare and implement an EU adaptation strategy and plan	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate resilience and adaptation plans should also cover the most affected policy sectors at EU level	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Robust obligation on Member States to develop national adaptation strategies and plans	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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### Adaptation planning and determination of risk owners (cont.):

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
Climate resilience and adaptation plans should also cover the most affected policy sectors at national level	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identification of risk owners responsible for and mandated to address the identified vulnerabilities	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Comments:

Robust, sector-specific adaptation planning at both EU and national levels as crucial for ensuring comparability, coherence, and the effective prioritisation of adaptation measures, especially given the cross-border and systemic nature of climate risks. For these plans to be viable and feasible, EU-wide coordination is required; however, care must be taken to ensure this does not result in additional administrative overhead.

From an actuarial perspective, the clear identification of risk owners is essential to ensure accountability, facilitate efficient capital allocation, and avoid gaps in implementation. National adaptation plans must be consistent across the EU by utilising harmonised scenarios while allowing Member States to apply regional refinements where appropriate, shared parameters, and common minimum standards to ensure underwriting sustainability. Furthermore, we believe that public and private sectors, alongside individual citizens, must all be engaged as stakeholders. A critical component of this framework will be transparent communication regarding adaptation measures and their quantified impacts to ensure all actors can manage their respective tail-risk effectively.

### Complementing action at EU level by Member State action, in compliance with the subsidiarity principle

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
Member States adopting national legal frameworks on climate resilience and adaptation (covering issues such as administrative set-up and coordination mechanisms, regular climate risk and vulnerability assessments, adaptation planning, early-warning mechanisms, governance at regional and local levels, alignment with subnational strategies and plans, inclusion of stakeholders and vulnerable groups, monitoring and evaluation framework)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Member States carrying out evaluations at appropriate levels to identify regions and groups of people that are particularly vulnerable to climate change, and developing plans for targeted adaptation measures to help these regions and groups	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Member States involving all relevant stakeholders, including particularly vulnerable groups, in adaptation policy planning	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Comments:

We support the requirement for Member States to adopt robust national legal frameworks, provided these developments cover appropriately the differences by EU regions and natural perils. From an actuarial perspective, inclusive policy planning is essential because climate impacts fall disproportionately on poorer and marginalised communities, as well as on SMEs with limited adaptive capacity.

From a technical perspective, maintaining the long-term viability of the insurance market (underwriting sustainability) and mitigating the potential for catastrophic systemic losses (tail-risk) requires that national resilience strategies specifically target and protect the most exposed segments of society. Furthermore, involving all relevant stakeholders—including the insurance and financial sectors—is vital to ensuring that adaptation plans are technically sound and that capital allocation is directed where it is most needed to maintain fiscal sustainability. Inclusive processes and clear responsibilities are essential to deliver fair and effective adaptation across the European Union.

## Monitoring, reporting, evaluation and learning

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
Development of a limited number of performance indicators for both the EU and Member States, for measuring the effectiveness of climate adaptation and resilience measures	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In line with the simplification agenda, improvement and streamlining of monitoring, reporting, evaluation and learning practices at EU and national levels, through more targeted reporting on climate impacts	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Incorporation of corresponding resilience progress indicators into existing sector legislation to avoid duplication and new reporting requirements	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Comments:

A streamlined and harmonised EU framework is essential to ensure that adaptation progress is measured consistently and transparently. For example, outcome-based indicators—such as the climate insurance protection gap—provide a tangible measure of financial vulnerability.

To ensure fiscal sustainability, we recommend that these indicators be incorporated into existing sector legislation to avoid duplication. This approach ensures that while the information base is "robust" for risk assessment, the reporting process remains "light" in terms of administrative overhead. We caution against the use of simplistic process-based metrics; the primary focus must remain on actual impact and avoided economic damages, which are the true measures of successful adaptation.

Please specify other impactful measures with transformational impact that the Commission should include in its legislative proposal on climate resilience:

Systematically integrate nature-based solutions (NbS) into adaptation, prevention and recovery frameworks. NbS should be embedded in building codes, zoning rules, land-use planning and post-disaster recovery so that they become a default option rather than an exception. Healthy ecosystems reduce losses, buffer extreme events and maintain long-term insurability, making them a core component of climate resilience.

Secondly, to support fiscal sustainability, the Commission should actively sponsor the development of large-scale preventive infrastructure. Such investments are essential to protect critical societal functions and reduce the volatility of future climate-related weather extremes.

## Decision-support tools for climate resilience

Access to clear, reliable and practical information about how climate change affects us and what we can do about it, is essential to better manage the risks and develop effective solutions. Open-access web-based tools can help meet this need by **reaching large audiences with tailored, visually engaging and interactive information**. However, most existing tools are designed for experts focusing on scientific rather than practical needs. Furthermore, tools targeting different geographies, climate hazards or sectors often use different methods and reference points to quantify future changes, making comparison difficult. Cross-border information is often missing. The Commission would like to get feedback on how it can best use Europe's wealth of climate data and digital capabilities to **improve access to clear, reliable, practical and coherent information on climate risk and adaptation solutions across regions and sectors**.

Where do you look for information about how climate change could affect you or your activities?

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
Sectoral organisations resources, including advisory and support networks	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regional and/or local authorities' resources	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

National government resources, including national meteorological services	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
European climate adaptation platforms and/or climate services	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
European scientific programmes and networks	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Where do you look for information about how climate change could affect you or your activities? (cont.)

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
Reach out to a consultancy to find and analyse this information for me	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
In the media, social media and online	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using artificial intelligence	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have never looked for such information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

What information would help you determine if and how to take action to better prepare for the effects of climate change?

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
Recent economic losses or damage caused by climate events in my area or in activities related to my job	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Current severity of extreme or unseasonal weather in the area where I live or work (e.g. expected number of days with temperatures exceeding 35 °C)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estimates of future severity of extreme or unseasonal weather in the area where I live or work	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Current impacts of extreme or unseasonal weather on my community and me in terms of health (e.g. excess mortality due to dangerous heat waves), and economic activities (e.g. crop production losses from heat, damage to energy infrastructure due to floods, etc).	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What information would help you determine if and how to take action to better prepare for the effects of climate change? (cont.)

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
Estimates of future impacts of extreme or unseasonal weather on my community and me in terms of health and well-being, and economic activities	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information on insurability of exposed assets	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Benefits of specific adaptation solutions in reducing impacts on health and wellbeing and specific economic activities.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If other information, please specify:

We would suggest that fundamental and extensive research on tipping points would be extremely beneficial, as well as assessing chronic degradation of climate systems over time.

The Commission considers developing a user-friendly web-based tool for non-experts that provides authoritative and harmonised quantitative information on climate change across Europe. This tool could translate the common climate scenarios into national, regional and local climate and weather conditions, which can be expected under these scenarios, and help to find possible solutions for addressing the identified risks. The Commission considers this tool essential for informing EU policies, addressing cross-border risks, and supporting people and businesses lacking alternatives. Would you benefit from such a tool?

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
Answer	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What features would help you use that tool?

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
Simple language that does not require specialist knowledge	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tutorials and onboarding information	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Visual presentation of information, e.g. on a map	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to download data or summary reports	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Clear link between climate risks and adaptation solutions	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### What features would help you use that tool (cont.)?

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
Navigation support through an AI-powered chat	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Links to other trusted sources for more specialised information	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to a help desk	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

### What other features would you find helpful?

1) Granular and Customised Risk Assessment: The tool should provide locally tailored information—at the postcode or address level—allowing for basic customisation for different user types, such as households and SMEs. It must enable asset- and group-level risk assessments. This would allow users to evaluate climate risk for specific buildings or broader portfolios, supporting accurate risk pricing and decisions on whether risks should be retained locally, pooled, or transferred. We would also suggest that the inclusion of demographic (mortality, morbidity etc) and economic outputs, could be useful outputs of this tool.

2) Advanced Modelling Capabilities: We believe it's important to have the ability to select multiple climate pathways (low-, medium-, and high-warming scenarios) and various time horizons. The inclusion of "what-if" analysis—reproducing economic losses from recent events to demonstrate how certain adaptation measures might have mitigated damage—is essential for evaluating the effectiveness of policy designs.

3) Visualising Adaptation Benefits: A core feature should be the clear comparison of future impacts both with and without specific adaptation measures (e.g., wetlands restoration). This enables users to directly visualise the risk-reduction benefits of concrete options, facilitating capital allocation toward the most effective solutions.

4) User Experience and Precision: While the tool should be as self-explanatory as possible, it must intuitively indicate the uncertainty ranges around projections. Integrating alert notifications and providing clear pathways for individuals to move from risk awareness to mitigation and adaptation actions will ensure the tool drives proactive resilience rather than just passive observation.

## Protecting people and supporting regional and local action

Climate change has a detrimental impact on human health, lives and livelihoods, disproportionately affecting the most vulnerable. The new framework should drive EU and Member States measures that help individuals and local communities to be better equipped to face climate risks. Because climate risks vary across Europe, action under the framework should be **place-based and co-designed with local and regional authorities** and communities. Launched in 2021 as a pilot initiative to support pioneer regional and local authorities, [the EU Mission on climate adaptation](#) is providing direct support and empowering European regions and local authorities to develop and implement place-based measures towards climate resilience. The new framework provides an opportunity to scale up this support to all regions and communities across Europe.

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What policy measures should the EU and Member States take to ensure that the most vulnerable groups and geographical areas receive adequate support and are protected from the disproportionate impacts of climate change?

EU:

Proactive measures are required to embed "just resilience" within the European framework. It is recommended that binding equity and vulnerability reduction objectives be integrated into the EU climate resilience framework to ensure a harmonised approach to social protection. Standardised social-vulnerability assessments should be mandated for Member States to allow for the data-driven identification of at-risk populations. To support fiscal sustainability, EU funds should be specifically earmarked for the most vulnerable regions. Furthermore, the promotion of affordable, innovative risk-sharing and insurance solutions for households and SMEs is vital to mitigate the concentration of tail-risk. This should be complemented by EU-wide disclosure obligations for property transactions, ensuring that climate risks are transparently communicated to buyers, thereby facilitating more informed capital allocation.

Member States:

Action should focus on integrating "fair transition" and social protection principles directly into national adaptation plans. The implementation of mandatory natural hazards insurance mechanisms is proposed as a key tool for maintaining underwriting sustainability and broadening the risk pool. National policies must provide targeted financial support for community-level adaptation and empower local authorities with the resources needed for local implementation. From a regulatory perspective, labour laws require adaptation to protect workers from extreme climate conditions. Finally, land-use planning must be strengthened to prevent "climate gentrification," ensuring that resilient infrastructure and nature-based solutions do not inadvertently displace low-income residents into higher-exposure areas.

What measures should the EU and Member States take to protect people's health against the impacts of climate change?

EU:

At the EU-wide level, standards should be established, encompassing mandatory early-warning systems, occupational heat-stress protocols, and minimum cooling requirements. The integration of climate-health risks into all relevant EU legislative frameworks, including workplace safety and air-pollution standards, is deemed essential. Furthermore, climate-resilient planning for health infrastructure should be mandated to ensure that hospitals, care homes, and emergency services maintain operational continuity during extreme weather events

such as heatwaves, floods, and wildfires. Support should be extended to Member States through targeted financing for health system upgrades and the funding of research into the long-term health impacts of climate change, including mental health and degraded ecosystems

## Member States:

At the national level, implementation of heat-health action plans with clear, predetermined triggers for public alerts and the activation of cooling centres. Significant upgrades to health and social-care infrastructure may be required to withstand extreme heat and flooding, with priority given to facilities serving vulnerable populations, such as schools and elderly-care homes. Strengthening primary care capacity and emergency preparedness, alongside training for health professionals on climate-related illnesses. Urban planning to prioritise nature-based solutions and the reduction of soil sealing to mitigate heat and pollution. Targeted outreach and community-level resilience measures for high-risk groups, including outdoor workers and those with chronic illnesses, are also necessary components of national strategies.

What measures should the EU and Member States take to provide greater support to regional and local stakeholders?

## EU:

Development of EU-wide minimum standards for local climate-risk assessments and adaptation plans, aligned with EU climate scenarios and integrating insurance protection gap indicators; creation of stable, long-term funding streams for local adaptation, especially for high-risk regions; facilitation of cross-border coordination (e.g. for shared river basins or coastlines); provision of harmonised climate data, scenarios, and risk maps; support for local capacity-building and technical assistance; research into additional climate scenarios would be beneficial.

## Member States:

Mandate and fund local climate-risk assessments and adaptation plans aligned with national scenarios; strengthen and clarify local governance and coordination structures (e.g. between municipalities, emergency services, insurers, and infrastructure operators); ensure predictable long-term financing for local adaptation including nature-based solutions; and improve access to insurance and risk-transfer solutions, with incentives for prevention and affordable coverage options.

What targeted initiatives should the EU and Member States implement to specifically support the EU's outermost regions in adapting to climate change, considering their particular exposure to extreme weather events and their unique geographical and socio-economic contexts?

## EU:

Allocation of dedicated adaptation funding for outermost regions and overseas territories to support climate-resilient infrastructure—such as ports, energy grids, and freshwater systems—specifically adapted to island and tropical conditions. Implementation of regional integration mechanisms to enable cooperation with neighbouring non-EU regions on early-warning systems, disaster response, and nature-based solutions. Provision of tailored climate scenarios and risk assessments that reflect the unique geographical contexts of

these regions. Facilitation of priority access to EU emergency and solidarity instruments for extreme event recovery, potentially through simplified procedures for remote territories. Strengthening of biodiversity and ocean protection programmes, recognising these ecosystems as critical resilience assets.

## Member States:

Development of territory-specific adaptation plans with dedicated budgets that reflect local hazards, such as cyclones and sea-level rise. Enhancement of cross-border cooperation with neighbouring regions on emergency response and coastal protection. Support for affordable insurance access, which may include the establishment of national risk-pooling schemes or public reinsurance backstops in areas where private market capacity is constrained. Investment in resilient public infrastructure, including water security and health facilities, adapted to remote and insular contexts. Protection and restoration of critical ecosystems, such as coral reefs and mangroves, to serve as natural buffers against extreme events. Strengthening of local emergency and health systems through enhanced training and response protocols. Meaningful involvement of local municipalities and civil-society organisations in the adaptation process, alongside support for economic diversification in climate-sensitive sectors like tourism and fisheries.

What are the most pressing barriers that should be removed to enable action at regional and local level?

- ☒ Lack of sufficiently specific data and information about current and future risks to design science-based policies
- ☒ Limited access to specialised support (specialist language, too technical, etc.) to help develop impactful measures, provided at national or EU level
- ☒ Insufficient funding or financing for regional and local measures, including access to dedicated national and EU funds
- ☒ Insufficient institutional capacity to absorb funding and develop a project pipeline.
- ☒ Limited engagement of local communities in designing and implementing measures
- ☒ Existing legislation that complicates efforts to deal with climate impacts
- ☒ Lack of consistent monitoring and reporting schemes that would provide incentives to act
- ☐ Other

How could the EU Mission pilot be leveraged or replicated to support action by all European regional and local stakeholders?

- ☒ Encourage Member States to develop Mission-type national initiatives with dedicated financial resources for their implementation
- ☒ Define the roles and responsibilities of National Missions within the Framework
- ☒



Mandate Member States to set up national platforms or coordination tables where local and regional stakeholders have a legally recognised role and responsibility

- ☒ Encourage Member States to dedicate financial resources to support regional and local action
- ☒ Connect EU funding opportunities with the relevant stakeholders to scale up the regional and local climate adaptation solutions developed within the Mission.
- ☐ Other

## Competitiveness – harnessing innovation opportunities

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Climate resilience and preparedness go beyond minimising and managing risks. They open **a new world of commercial opportunities and potential to innovate and create new project pipelines and markets**. There is a rapidly growing demand for resilience products and services, such as water technologies, regenerative agriculture solutions, heat and drought resistant crops, climate risk insurance, climate services and the use of space data, risk modelling tools, developing smart systems to predict and prevent supply chain disruptions, climate resilient construction materials and designs, technologies for resilient energy and transport infrastructures, or health system adaptation solutions and innovation. Deploying such technologies **can enhance the competitiveness of EU companies and key economic sectors** by improving adaptive capacity and opening new export markets. The new Framework aims to support EU companies, SMEs and start-ups in **seizing these opportunities, helping position Europe as a global leader in climate resilience innovation**.

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In your sector/industry/area, what are the climate resilience technologies /innovations that you need to develop or scale up to make your sector /industry more competitive?

Emphasis is placed on the development of “Build Back Better” approaches, where insurance policy terms and conditions enable resilient reconstruction and relocation-based rebuilding following catastrophe events. The integration of adaptation advisory services and dedicated financing for climate measures into insurance products is considered essential for enhancing sectoral competitiveness. Furthermore, the scaling of resilience-linked insurance products that provide tangible rewards for proactive adaptation measures is viewed as a priority for the industry.

Technological advancement should focus on improving the accessibility and interoperability of existing climate-risk data (at the national level where possible). This includes leveraging established catastrophe-modelling platforms to better integrate non-linear impacts, compound events, and long-term warming trajectories. The systematic use of standardised digital tools—such as remote sensing and satellite imagery—is considered as a positive innovation that could enhance the efficiency of claims assessment and monitoring. Finally, improved access to detailed risk maps and online information regarding publicly financed adaptation measures is deemed necessary to support informed decision-making.

What measures could improve the competitiveness and innovation of climate resilience products/services in your sector/industry the most?

	Very relevant	Relevant	Neutral	Not very relevant	Not relevant at all
Increased public funding and investment	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased private funding and venture capital	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved access to specialised expertise/workforce	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved market certainty and regulatory support	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What measures could improve the competitiveness and innovation of climate resilience products/services in your sector/industry the most (Cont.)?

	Very relevant	Relevant	Neutral	Not very relevant	Not relevant at all
Access to technologies/ modernisation of equipment	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased consumer awareness and demand	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Innovative climate risk management and insurance tools (e.g. parametric coverage)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If other, please specify:

It is observed that while data transparency and the exchange of best practices are of paramount importance, a significant degree of responsibility should be entrusted to the public-private sector to promote initiatives that advance resilience goals without reliance on additional mandatory regulatory measures. Some of our members have expressed concern regarding the potential for European businesses to face a competitive disadvantage compared to other regions if legal requirements and climate targets remain significantly more stringent. While some other members consider it necessary to maintain the current climate targets in order to address both physical risks and to provide reliable long-term support for European carbon-neutral technology innovation and investment.

From a technical actuarial perspective, the recognition of insurance and reinsurance coverages within the capital model (e.g., the Standard Formula) is considered a primary lever for incentivising resilience. Furthermore, the development of frameworks that enable longer-term customer retention is essential to allow the financial benefits of adaptation measures to be realised over time.

## Finance and insurance

Climate change is already imposing significant measurable costs on consumers, businesses and economies. Extreme weather events and chronic risks such as sea level rise or soil subsidence - damage assets, disrupt supply chains, and reduce productivity, turning them into a mainstream financial concern. Therefore, it is **crucial to factor in climate resilience in investment and financial decisions**, to reduce climate-related economic losses and minimise disruptions to the business continuity and maintain revenues. To fully address the risks, the building of climate resilience would need to be complemented by insurance. Currently, only 25% of the losses are insured and the insurance premiums continue to rise. The scale and systemic nature of climate-related economic impacts make it impossible for governments to bear their cost and will require engagement, including financial contributions, from all levels of governance, economic sectors and the public. The new Framework will put forward policy measures **to scale up resilience finance** needed to fund the expanding project pipeline. It will also include measures aiming to improve **access to affordable insurance and reduce the widening insurance-protection gap**.

### Public sector role in funding climate resilience

	Yes	No
Is it necessary to integrate climate resilience considerations in fiscal planning and financial decisions at all levels of the public sector as well as in the private sector?	<input checked="" type="radio"/>	<input type="radio"/>
Would incorporating climate resilience considerations in investments, including public spending and procurement limit economic losses from climate events?	<input checked="" type="radio"/>	<input type="radio"/>

### Private-sector investments and climate resilience

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
National adaptation plans should be designed to serve as resilience and adaptation investment plans, unlocking the full potential of private-sector funding.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The private sector needs more guidance on how to incorporate climate resilience into investment and business decisions.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Effective public-private risk sharing mechanisms for climate adaptation investments (such as public-private partnerships, blended finance, disaster bonds, etc.) would increase resources invested in climate resilience and adaptation.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## What are the key obstacles for scaling up investments strengthening climate resilience and adaptation?

Several systemic obstacles currently hinder the scaling of climate resilience investments. A primary challenge is the misalignment of incentives between consumers, insurers, and governments, which creates a "negative circular dynamic" where responsibility for investment is often deferred. This is exacerbated by short-termism, excessively long payback periods, and the limited recognition of the financial value of avoided losses, which weakens the business case for private capital.

From an industry perspective, a distinction must be made between household and corporate insurance, as awareness levels and risk impacts differ significantly. While insurance companies possess a high awareness of climate impacts, they face substantial regulatory, tax, and legal barriers. Significant obstacles arise where resilience measures involve public goods or infrastructure—such as large-scale flood defenses—where clear frameworks for private returns on investment are often lacking, and responsibility traditionally resides with the public sector. Finally, the absence of stable long-term policy signals and adaptation measures may further prevent the establishment of a stable investment environment necessary to close the protection gap.

## What policy measures would help overcome these obstacles and boost climate resilience finance?

Technical measures include the development of an EU-wide climate-risk data infrastructure to reduce parameter uncertainty and enable more precise risk pricing and actuarial modelling. The deployment of derisking instruments, such as first-loss tranches and blended finance, is recommended, particularly where benefits are largely public.

Furthermore, insurance availability and affordability may be strengthened through exploring appropriate public-private risk-sharing mechanisms, including national and/or EU-level backstops where appropriate that are explicitly linked to prevention measures.

However, such mechanisms should be carefully assessed on a case-by-case basis to avoid moral hazard and to ensure they complement, rather than undermine, existing robust national insurance markets and established adaptation strategies. Finally, the systematic adoption of "build-back-better" standards and the updating of professional guidance to reflect climate risks as non-stationary and systemic are deemed necessary to ensure long-term underwriting sustainability.

To boost climate resilience finance, the provision of stable, long-term regulatory signals is considered essential to avoid abrupt reversals that undermine investor confidence. High coordination between different European Commission Directorates-General is recommended to ensure a cohesive investment environment.

Targeted economic incentives—including tax credits, depreciation allowances, and favourable capital treatment—are identified as key levers to reduce upfront costs and formally recognise the value of avoided losses in cost-benefit assessments.

## Does the existing EU accounting framework duly reflect the climate physical risks in the valuation of assets? If not, what policy measures do you propose?

It may be observed that current EU accounting and regulatory frameworks may not always adequately reflect physical climate risks in asset valuation, particularly for long-lived assets such as infrastructure and real estate.

Existing accounting rules remain largely backward-looking within the constraints of current accounting policies, whereas climate impacts are essentially forward-looking and increasingly material. This results in a systematic underestimation of both climate risks and the value of avoided future losses generated by resilience investments.

From an actuarial and financial perspective, the integration of forward-looking climate-risk assessments into valuation rules—such as Discounted Cash Flow (DCF) models—is recommended. Furthermore, consistency should be strengthened between CSRD disclosures and financial statements, requiring entities to explain how physical risk exposures are reflected in key valuation and depreciation assumptions.

For financial institutions, the integration of physical risk into credit impairment and collateral valuation frameworks is deemed necessary to reflect its impact on Probability of Default (PD) and Loss Given Default (LGD). While a market-driven approach to pricing is favoured, it is recommended that accounting standards be aligned with the latest scientific climate-risk data rather than historical averages. However, a warning is noted regarding the potential for excessive regulatory complexity.

## Do the other existing policy / regulatory frameworks duly account for the climate physical risks? If not, what policy measures do you propose?

It may be observed that some EU and national policy frameworks may not yet fully account for physical climate risks, as many remain backward-looking or inconsistent across sectors.

From a supervisory standpoint, climate-risk management should be further integrated through the Own Risk and Solvency Assessment (ORSA) and targeted stress tests. However, it is noted that different national regulators currently maintain varying approaches to the organisation and review of these elements, which may hinder consistency across the Union. Furthermore, while the Critical Entities Resilience Directive (CERD) requires risk assessments for essential services, its effectiveness is constrained by a lack of harmonised, forward-looking adaptation standards and limited linkages to asset valuation and long-term investment decisions.

To address these gaps, policy measures should focus on aligning land-use, building, financial, and infrastructure standards with future climate conditions. It is essential that public and private decision-making frameworks are updated to reflect the financial costs of inaction and the specific value of avoided future losses.

## Climate risk insurance

	Fully agree	Slightly agree	Neutral	Slightly disagree	Fully disagree
Location-specific comprehensive information on climate hazards could improve insurance uptake.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate risks insurance products need to be clearer on the hazards they cover	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## What policy / regulatory measures -based on market-based mechanisms- do you propose to address the increasing insurance gap and improve access to affordable insurance?

To address the widening insurance protection gap and maintain affordability, the development and strengthening of public-private partnerships (PPPs) and risk-sharing backstops are potential options for specific markets or for managing extreme tail-risk events. These mechanisms should clearly define the risk-splitting between public and private sectors, potentially making participation conditional on insurers supporting adaptation through data-sharing and co-financing prevention. Forward-looking modelling should include appropriate recognition of how adaptation measures lower expected claims costs. To increase market penetration and reduce adverse selection, measures such as mandatory insurance offers or the bundling of natural catastrophe cover into multiperil products are identified as effective strategies.

A balanced approach is suggested that combines social mutualisation—using models such as "Flood Re"—with a risk-based perspective. It is considered vital to maintain risk-based pricing to preserve necessary adaptation signals, while achieving affordability through robust prevention standards, updated building codes, and the prohibition of development in high-risk zones. For vulnerable households and SMEs, targeted and transparent subsidies or tax incentives are proposed to support coverage without distorting underlying risk signals. Finally, the integration of resilience criteria into mortgage and lending standards is recommended to mobilise broader financial sector support for climate adaptation.

- What kind of risk pooling and transfer mechanisms would be most suitable to increase insurance cover for secondary perils in the European Union?

A multi-layered approach is proposed to increase insurance coverage for secondary perils, such as hail, wildfires, and floods. This structure should recognise and integrate the various financing tools available across the insurance and reinsurance markets, private investors, and the public sector at both national and EU levels.

Priority should be given to strengthening and coordinating existing national insurance systems and private market capacity. For Member States where protection gaps persist, the development of further risk-sharing mechanisms—including potential national or EU-level backstops—could be explored as a complementary measures for extreme tail-risks.

Access to such mechanisms should be contingent upon documented efforts in mitigation, prevention, and the adoption of "build-back-better" standards. For Member States currently lacking robust mechanisms, the establishment of national secondary-peril pools—potentially through mandatory insurance or automatic add-ons—is an option to be evaluated based on local market needs. These pools could benefit from harmonised data standards and could be complemented by cross-border private retrocession to effectively diversify correlated losses.

Furthermore, the industry could be encouraged to collaborate on sharing technical expertise and the development of European co-insurance platforms or syndication facilities could be potentially beneficial if it enables multiple insurers to jointly underwrite complex or novel risks, including nature-based solutions. These platforms should be supported by shared data, regional risk-engineering hubs, and, where appropriate, public guarantees. Technical innovation is also highlighted through the expanded use of parametric products and catastrophe bonds, which facilitate accelerated payouts based on pre-defined triggers.

- How can insurers in the Union access new capital to back climate-related policies?

While the current availability of capital within the insurance market and reinsurance sector is recognised as the primary source of capacity, a diversified mix of funding mechanisms continues to evolve, integrating traditional reinsurance, Insurance-Linked Securities (ILS), and other private funding sources.

The role of public-private risk-sharing mechanisms, such as national or EU-level backstops, may be considered for managing extreme tail-risk events where private market capacity is exhausted, provided they are designed to avoid moral hazard and do not displace private capital. Furthermore, voluntary industry-led collaboration to share expertise and risk data for complex climate risks could be encouraged to support market stability.

From a technical market perspective, the expansion of catastrophe bonds and parametric products is identified as a primary lever for accessing alternative capital, provided these instruments are supported by streamlined regulatory processes and clear EU guidance. Additionally, the use of blended finance and adaptation-linked instruments—such as resilience bonds or EIB-style public co-investment structures—is recommended to cofinance risk reduction and adaptation measures alongside private capital. For mutual insurers and stock companies, internal capital generation through retained earnings or the issuance of own-fund instruments remains a fundamental component of the capital structure.

- **How to mobilise private investor interest in insurance-linked investment vehicles?**

To mobilise private investor interest in insurance-linked investment vehicles, it is necessary to address the perceived complexity and lack of transparency that currently limit market participation. The promotion of EU-wide ILS frameworks—featuring harmonised rules, clear disclosure requirements, and simplified cross-border issuance—is recommended to reduce transaction friction.

From an investor perspective, confidence is maintained through risk-based pricing and the use of objective attachment points, caps, and triggers. It is deemed vital that payout structures are transparent and free from political interference or opaque discretion. Technical standardisation and improved data quality in climate-risk modelling are required to provide institutional investors with the comparable and auditable information necessary to price frequency and tail risks credibly.

Furthermore, providing greater clarity on risk exposure and the quantified impact of prevention measures is considered a key factor in attracting capital. This should be supported by a stable, forward-looking capital treatment and incentives that encourage a long-term investment perspective. Alignment of insurance-linked returns with regional and national adaptation strategies is proposed, alongside the integration of nature-based solutions into ILS structures, thereby allowing investors to capture a "resilience dividend" from verified risk reduction.

- **Is there a need for a European marketplace where climate-related risk can be pooled among insurance companies and non-insurance investors?**

While it is recognised that certain market mechanisms—such as Catastrophe bonds and side-car structures—already provide opportunities for non-insurance investors, the establishment of a dedicated European marketplace for climate-related risk could help to preserve collective insurability. As climate risks become increasingly complex for individual insurers and national markets to model or absorb, such a platform would serve to pool risks, capital, expertise, and data across the Union.

Moreover, an EU co-insurance or syndication platform could enable insurers to share modelling capabilities, risk-engineering resources, and claims experience. This could be particularly effective in unlocking capacity for hard to-insure risks, including secondary perils, nature-based solutions, and early-stage green technologies. The platform could potentially modelled after a "Lloyd's-style" facility—with a dedicated supervisory perimeter and harmonised rules for syndication.

Such a marketplace would complement existing public-private partnerships (PPPs) and strengthen financial stability by reducing transaction costs and modelling uncertainty. By anchoring critical risk-pooling and capital-mobilisation capabilities within Europe, the initiative would support the Union's strategic autonomy. Additionally, premiums collected through the facility could be strategically reinvested in sustainable assets and adaptation projects, thereby maximising the resilience impact on both sides of the balance sheet.

### Additional comments:

Closing the protection gap requires aligning insurance markets with broader emissions reduction and climate resilience goals. Market-based mechanisms can only succeed if they are paired with strong prevention standards, credible transition plans, nature-based solutions, and forward-looking risk assessments. Public-private mechanisms should reward mitigation and adaptation, and not only seek to compensate damages after the fact.

What policy measures would be needed to avoid climate insurance protection gaps from having negative repercussions on financial or macroeconomic stability?

- ☒ Promote innovative climate risk diversification and/or transfer approaches to mitigate the concentration of risk within specific sectors or regions.
- ☒ Encourage market-based solutions that connect those who can afford to finance risk with those seeking climate risk coverage – this helps ensure business continuity and avoid disruptions caused by natural catastrophes.
- ☒ Other

If other, please specify:

To maintain long-term financial and macroeconomic stability, a systemic approach is required to prevent widening protection gaps from transmitting shocks to mortgage markets and sovereign balance sheets. Climate-related insurance dynamics should be integrated into macroprudential supervision, recognising that uninsurability can act as a catalyst for financial instability through property markets and lending channels.

From a technical standpoint, forward-looking risk assessments must be enhanced to capture tipping-point dynamics and the macro-financial implications of protection gaps. A potential proposal is the introduction of prudential incentives for resilience-enhancing insurance, such as macroprudential capital buffers with potential



reductions for insurers that maintain broad coverage and support verified risk-reduction measures.

Access to these public-private partnerships can be explicitly linked to credible adaptation efforts by insurers. From an actuarial perspective, the explicit recognition and management of hard-to-insure risks is vital; failure to define the boundaries of private insurability can lead to mispricing and sudden market exits. Finally, overall systemic risk should be reduced through strengthened prevention standards—including nature-based solutions and managed retreat—supported by a framework defined by simplicity, standardisation, and predictability in risk-sharing.

## **Contact**

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