# EIOPA's Pilot Exercise on Climate Change Adaptation in Non-Life Underwriting and Pricing

EIOPA Sustainable Finance Roundtable - 7 December 2021

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## **CLIMATE CHANGE: CODE RED FOR HUMANITY**

## Climate change is expected to increase physical risk exposures substantially in the next decades

- Increase in frequency and intensity of extreme weather and climate-related events (e.g. 2021 IPCC report)
- Findings by attribution research underline a significant anthropogenic influence on certain extreme weather events (WMO 2021)
- Substantial global GHG-emission levels: stronger and faster materialization of climate change-related effects expected
- UN Secretary-General António Guterres: 2021 IPCC report is a "code red for humanity"

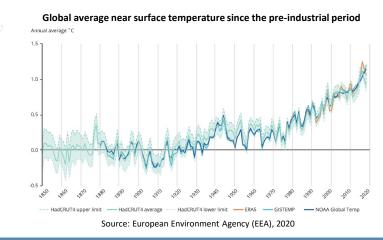
## What does that mean for Europe with regard to physical risk exposures?

EEA 2021 Report: Europe's changing climate hazards

Northern Europe: increase in annual precipitation and heavy rainfall

**Central Europe:** lower summer rainfall, but more frequent and stronger weather extremes, including heavy precipitation, river floods, droughts and fire hazards

Southern Europe: hotter summers, increased risk of droughts and wildfires





## **CLIMATE CHANGE AND INSURANCE**

## EIOPA published its report on non-life underwriting and pricing in light of climate change in July 2021

- It discusses challenges associated with annual re-pricing of non-life insurance contracts in context of climate change
- Higher physical risk exposures lead to higher risk-based premium levels: negative impact on long-term affordability and availability of insurance against climate-related hazards possible

## Some market implications

The New York Times

With Extreme Weather, Home Insurance Will Cost More. If You Can Get It.

Extreme weather is causing billions of dollars in property damage with a greater ... of insurance, along with stricter terms and conditions,...

30.09.2021





## California Department of Insurance

Consumers / Dealing with Catastrophes / Mandatory One Year Moratorium on Non-Renewals

## Mandatory One Year Moratorium on Non-Renewals

Insurance Commissioner Ricardo Lara, while serving as state senator, authored Senate Bill 824 (2018). This important consumer protection law requires a mandatory one-year moratorium on insurance companies cancelling or non-renewing residential insurance policies in certain areas within or adjacent to a fire perimeter after a declared state of emergency is issued by the Governor.



Suncorp and IAG temporarily stop selling insurance in fireaffected areas of Victoria and NSW

Two of Australia's biggest insurers, Suncorp and IAG, have temporarily stopped selling insurance policies across large swathes of Victoria...

14.01.2020



Climate change will continue for many years to come – Adaptation to climate change important task for societies and economies



## RISK REDUCTION: CLIMATE CHANGE ADAPTATION

## **Climate-related adaptation measures**

- ...implemented ex-ante to a loss event reduce the policyholder's physical risk exposure and insured losses
- ...can be a key tool to maintain the availability and affordability of non-life insurance products in the future



## Some examples of climate-related adaptation measures

- Installation of water or storm resistant external walls, windows, doors
- Domestic flood protection walls / sandbags
- Forecasting and warning systems for extreme weather events

## EIOPA's Pilot Exercise on Climate Change Adaptation in Non-Life Underwriting and Pricing

- i) How are climate-related adaptation measures integrated in product design and pricing of non-life insurance contracts?
  - Collect and share good underwriting practices
- ii) How are the risk reducing effects of adaptation measures reflected in technical provisions and non-life underwriting SCR?
  - Assess the risk-based appropriateness of the corresponding prudential treatment





## PILOT EXERCISE (1/3)

#### APPENDIX A: CLASSIFICATION OF CLIMATE-RELATED HAZARDS<sup>669</sup>

	Temperature- related	Wind-related	Water-related	Solid mass-related
Chronic	Changing temperature (air, freshwater, marine water)	Changing wind patterns	Changing precipitation patterns and types (rain, hail, snow/ice)	Coastal erosion
	Heat stress		Precipitation or hydrological variability	Soil degradation
	Temperature variability		Ocean acidification	Soil erosion
	Permafrost thawing		Saline intrusion	Solifluction
			Sea level rise	
			Water stress	
Acute	Heat wave	Cyclone, hurricane, typhoon	Drought	Avalanche
	Cold wave/frost	Storm (including blizzards, dust and sandstorms)	Heavy precipitation (rain, hail, snow/ice)	Landslide
	Wildfire	Tornado	Flood (coastal, fluvial, pluvial, ground water)	Subsidence
			Glacial lake outburst	

Source: Annex A of the EU Taxonomy Climate Delegated Act supplementing Regulation (EU) 2020/852

## For the pilot exercise, EIOPA is particularly interested in insurance products that:

- Offer insurance coverage for climate-related hazards according to the EU Taxonomy (temperature-, wind-, water- and solid mass-related)
- Integrate adaptation measures that reduce policyholder's physical risk exposure to climate-related hazards
- Ideally set incentives for policyholders to take up costly adaptation measures, e.g. through reduced premiums or deductibles

### **Market Examples:**

- > Storm coverage: Premium discounts for houses meeting specific building standards
- > Flood coverage: Premium discounts for houses with protection measures
- Crop Insurance: Real-time weather data and alert systems
- Property Insurance: House assessments aiming at climate-related risk prevention



# PILOT EXERCISE (2/3)

## Pilot Exercise with volunteering insurers: two-step approach

- I. Excel-based questionnaire to be filled in from 07 December 2021 to 04 February 2022
- II. Dedicated interviews to collect further insights into product design and prudential aspects in March 2022



Introduction

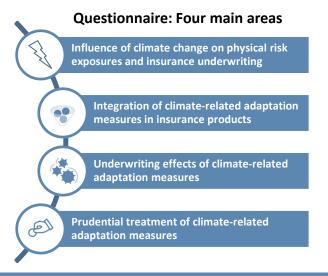
Climate change is expected to increase physical underwriting risk exposures in certain non-life insurance business. For instance, the 2021 IPCC report shows were the next two decades, climate change will lead to a substantial increase in physical risk exposures due to more extreme weather events. As a consequence, risk-based premium levels are expected to increase substantially over time, which could impair the long-term affordability and availability of insurance products with coverage against climate-related hazards. Climate-related adaptation measures that are implemented ex-ante to a loss event, for example water-proof external walls in case of flood risks, reduce the policyholder's physical risk exposure and insured losses. As such, they can be a key tool to maintain the availability and affordability of non-life insurance products in the future.

Based on EIOPA's report on non-life underwriting and pricing in light of climate change, published in July 2021, and on the EU Commission's "Strategy for Financing the Transition to a Sustainable Economy", EIOPA is conducting a pilot exercise with volunteering insurers on the integration of climate-related adaptation measures in non-life insurance products. The pilot exercise is intended to improve the understanding of how insurers integrate climate-related adaptation measures in non-life insurance products and to assess the appropriateness of the prudential treatment of climate-related adaptation measures in the technical provisions and solvency capital requirements for non-life underwriting risk under Solvency II.

The pilot exercise consists of a two-step approach: i) an excel-based questionnaire with 24 questions to be filled in by all participants from 07 December 2021 to 04 February 2022, and ii) based on the outcome of the survey, interviews with EIOPA, the relevant NCA and the participating undertaking to collect further insights into product design and prudential aspects in March 2022.

Please provide your answers in this Excel-file and send it to EIOPA by email until 04 February 2022: impactuw@eiopa.europa.eu



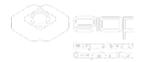




## PILOT EXERCISE (3/3)

### How to participate?

Send email to: impactuw@eiopa.europa.eu



### Information also on EIOPA's website:

Browse -> "Consultations and Surveys"

Please send the excel file back to EIOPA until 4 February 2022



## PILOT EXERCISE ON CLIMATE CHANGE ADAPTATION IN NON-LIFE UNDERWRITING AND PRICING

EIOPA launches the Pilot Exercise during the Sustainable Finance Roundtable on 7 December 2021. We invite interested insurers to participate in the exercise.

#### OBJECTIVES



To betterunderstand how insurers integrate climaterelated adaptation measures in non-life insurance products



To assess the appropriateness of the prudential treatment of climate-related adaptation measures in the technical provisions and solvency capital requirements for non-life underwriting risks under Solvency II

#### WHAT KIND OF INSURANCE PRODUCTS?

- Products that offer insurance coverage against climaterelated hazards
- Products that integrate adaptation measures lowering the physical risk exposure to climate-related hazards
- Products that ideally set incentives for policyholders to take up adaptation measures

#### BACKGROUND CONSIDERATIONS

Climate change is expected to increase physical underwriting risk exposures in certain non-life insurance business lines.

As a consequence, risk-based premium levels are expected to increase substantially over time, which could impair the long-term affordability and availability of insurance products with coverage against climate-related hazards.

Climate-related adaptation measures that are implemented evante to a loss event, for example water-proof external walls in case of flood risks, reduce the policyholder's physical risk exposure and insured losses. As such, they can be a key tool to mahtain the availability and affordability of non-life insurance products in the future.



# **THANK YOU!**

For more information visit: <a href="https://www.eiopa.europa.eu">https://www.eiopa.europa.eu</a>

