

RVS Monte Carlo 2022 Munich Re Media conference

11 September 2022
Torsten Jeworrek, Thomas Blunck







Image: hanohiki / stock.adobe.com

01

Economic market environment



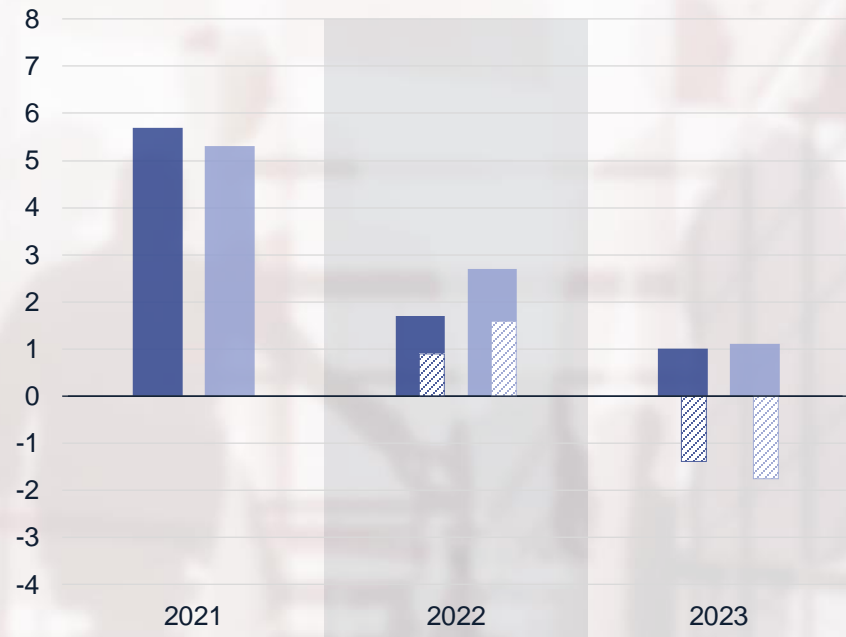


Growth is slowing down while inflation is at very high levels

Challenging times for the world economy

Real GDP growth, baseline and risk scenario

Annual average, in %

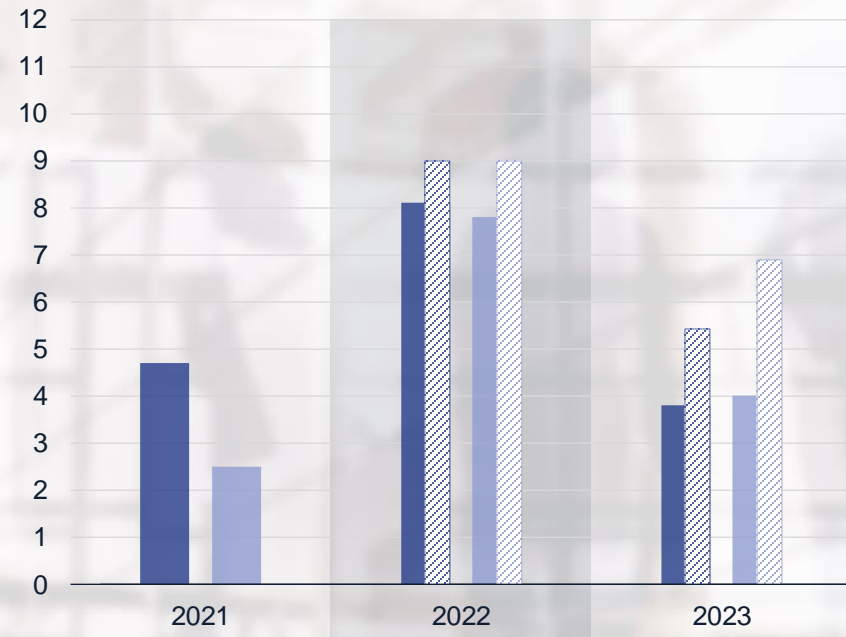


■ US ■ Eurozone ▨ Risk scenario

Source: Munich Re Economic Research

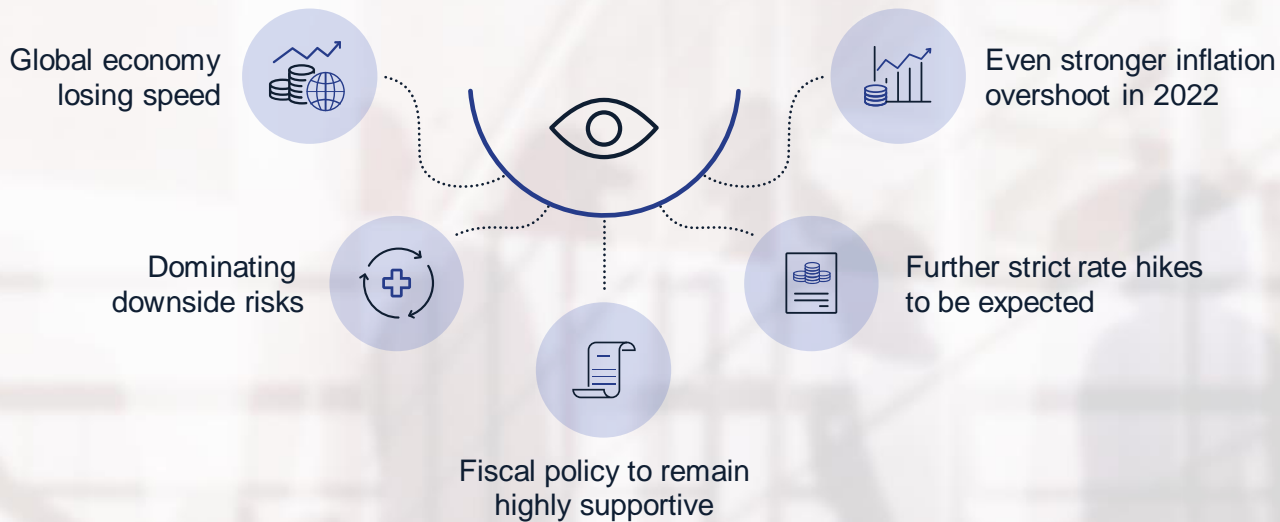
CPI inflation, baseline and risk scenario

Annual average, in %



Monte Carlo 2022

12 September 2022



Recession risks are rising ...

- Very fragile, uncertain economic environment
- Elevated inflation and rising recession risks in major economies
- Inflation pressures remain elevated and could continue to surprise on the upside in Europe – US headline inflation may be close to a turning point, but overall uncertainty expected to remain very elevated into 2023

... while outlook is highly uncertain

- Central banks' task: Reigning in inflation without derailing the economy
- Recent data points to further slowdown ahead
- Different risk drivers: Natural gas shortages in Europe, monetary policy tightening in the US, pandemic in China



02

Insurance market outlook



Following years of strong growth in major regions, reinsurance market expected to grow at least in line with primary business

Global premium development 2019–2021/2022e–2024e

P-C RI: Ceded premiums 2021



Europe	€92bn	30%
North America	€110bn	36%
Asia Pacific	€75bn	24%
Latin America	€17bn	5%
Africa/Middle East	€15bn	5%
Total	~€309bn	100%

P-C RI and PI real growth rates (CAGR)

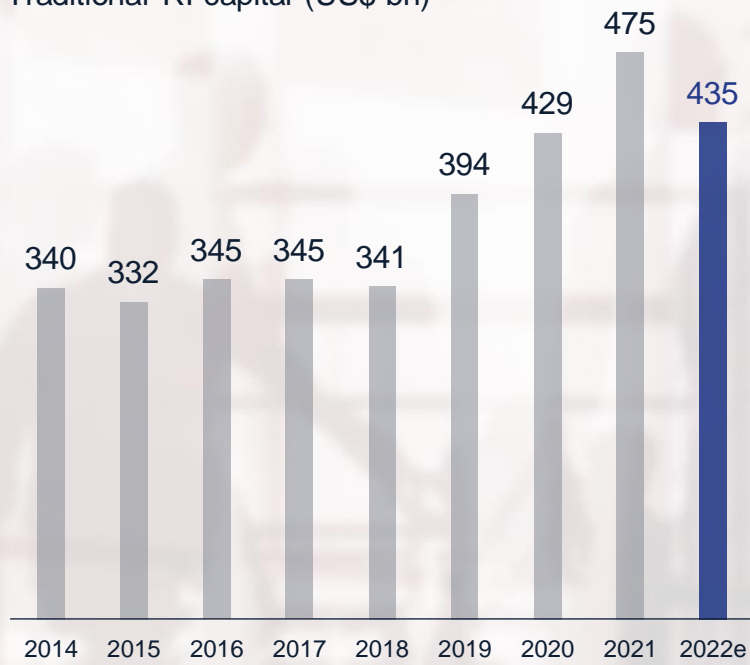
RI		PI	
19–21	22–24	19–21	22–24
3%	1–2%	1%	1%
10%	2–3%	3%	2%
5%	3–4%	2%	4%
5%	4–5%	1%	3%
1%	3–4%	0%	4%
6%	2–3%	2%	2%

Insurance capacity is set to dwindle

Alternative capital re-evaluating investment case

Dedicated reinsurance capital

Traditional RI capital (US\$ bn)



Traditional market

- Traditional reinsurance capital expected to shrink for the first time since 2018
- Capital markets under pressure, all asset classes affected; esp. increasing interest rates with negative impact on shareholder equity in the short term
- European reinsurers have additionally been hit by the sharp rise in the US Dollar against the Euro, impacting capacity
- Withdrawal of capacity in some lines of business; some competitors with decreasing nat cat risk appetite
- Increasing competition for reinsurance capacity

Non-traditional capacity/Alternative Risk Transfer (“ART”)

- Capital invested in Alternative Risk Transfer (ART) has leveled off since 2019 at around US\$ 100bn¹
- Loss experience has materially reduced portfolio returns since 2017
- Loss “creeps” and unexpected loss drivers (secondary perils, COVID, war) have further increased uncertainty
- Investor scepticism on mainstream products’ investment case
- ART and traditional markets seem more aligned in their assessment of opportunities vs. risks

¹ Sum of reported top 50 fund NAV plus guess on non-reported capital
Source: AM Best, Guy Carpenter, Munich Re

Overall market environment challenges insurance industry

Munich Re is taking advantage of capacity tweaks in the market



Inflation: Increasing concern about **pricing adequacy** – July renewals were sufficiently priced and successful.



Recent years showed high losses from non-peak perils and unexpected events (pandemic, war in Ukraine).



Tendency of reduced cat capacity in the market – Munich Re is leveraging cat risk know-how and financial strength.



Cyber risks have increased – Strict focus on stand-alone profitability, shaping the market as a market leader.



Munich Re remains the partner of choice with financial strength, expertise and continued high capacity.



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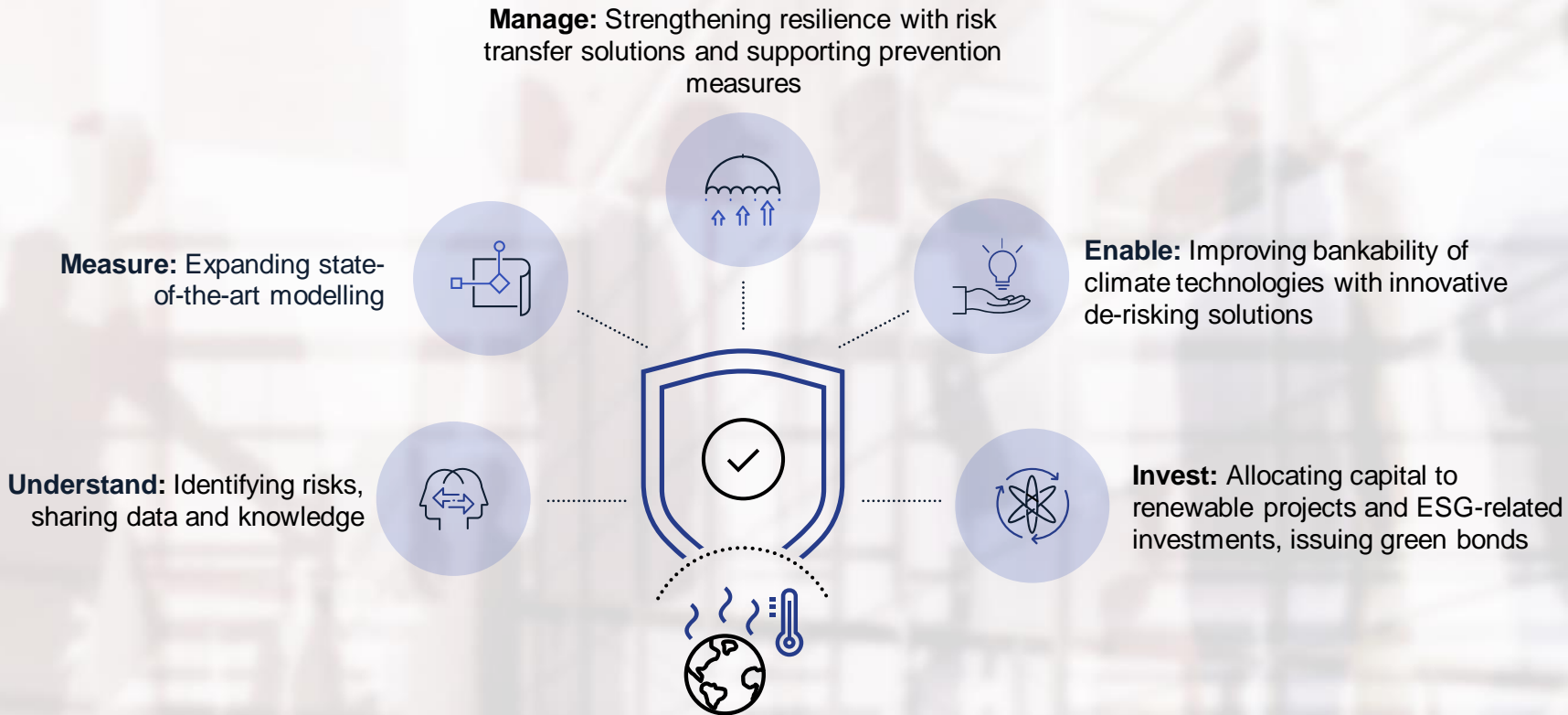
Climate risk and strategy





Insurance industry counters climate change

Our approach: Understand – Measure – Manage – Enable – Invest



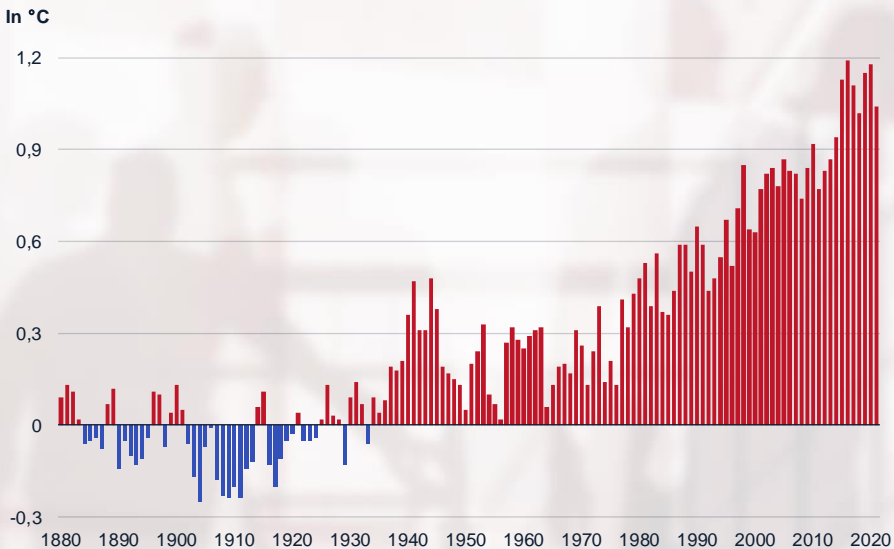


Understand: Global warming is changing probability distributions

Small increase in average temperatures → large increase in probability of extremes

Linear temperature trend (1881–2021): 1.2°

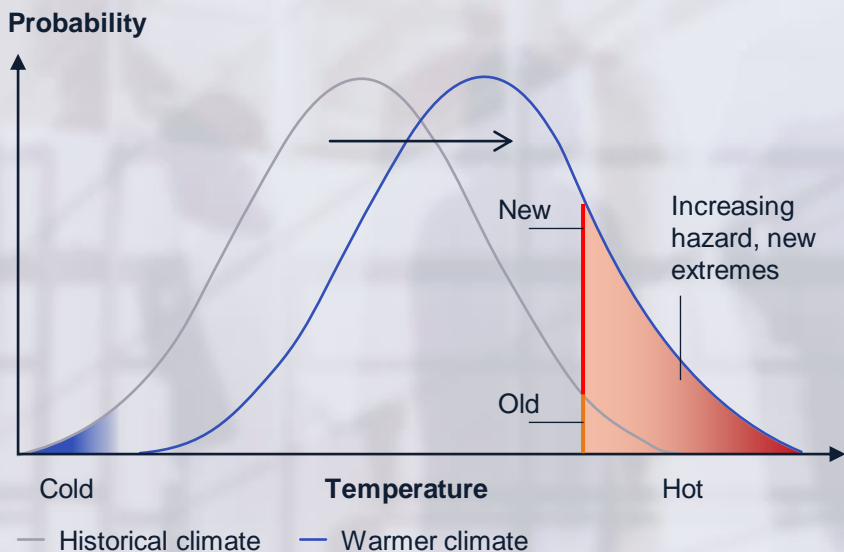
Man-made share >>50%



Annual temperature anomalies (°C) compared to the 1880–1900 average

Source: NOAA

Increase in probabilities of extreme temperatures and new extremes

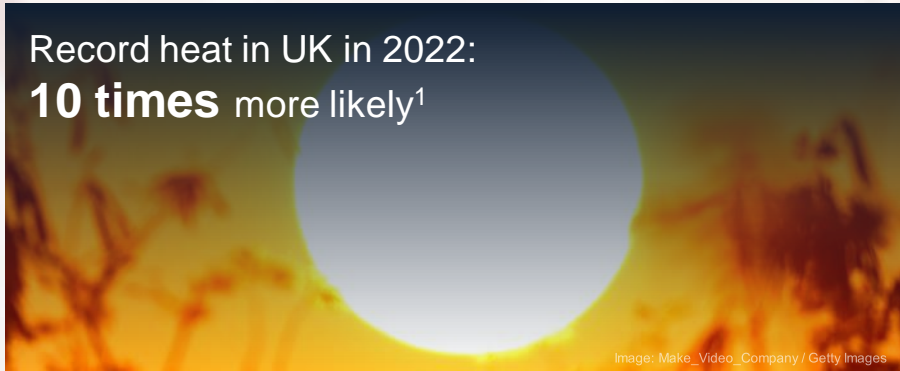


Increase in global average temperatures – changing probability distributions

Understand: Impact of climate change is becoming ever more evident

Scientific attribution studies show increasing probabilities of extreme weather events

Record heat in UK in 2022:
10 times more likely¹



Europe floods 2021: **€46bn** in losses
Likelihood of such event has increased¹



Typhoon Hagibis (2019): Climate change added
US\$ 4bn to insured losses¹



Wildfires: **Climate change**
is changing the risks²



¹ World Weather Attribution (WWA) ² Munich Re

Prevention and reduction in the insurance gap is key

Insurers and societies alike have to gear their risk management to this reality

Measure: Munich Re invests in HD modelling of non-peak perils

Investment in advanced modelling capabilities to ensure state-of-the-art risk management: High-res risk models needed for regional events.

Non-peak perils like flash floods, hailstorms or wildfires are on the rise and impacted by climate change, depending on the region.

Manage: Increase prevention to limit losses

Each € saves >10¹

Prevention measures against flooding proved highly effective – achieving similar effects for flash floods also requires review of building regulations.

Each US\$ saves 6²

US study shows how hurricane resilience spending is paying off.

Manage: Reduction in the insurance gap to foster resilience

>95%

Share of uninsured nat cat losses in emerging/developing countries remains unchanged.

>75%

Uninsured losses from the 2021 European floods indicate flood insurance gap in many developed countries.

¹ Munich Re extrapolation of flood protection investments following the 1962 Hamburg flood

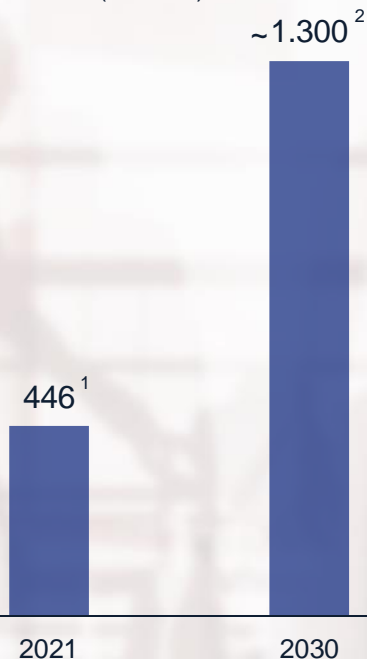
² National Institute of Building Sciences, 2019 (<https://www.nibs.org/projects/natural-hazard-mitigation-saves-2019-report>)

Insurance market for climate technologies sees strong growth



Huge investments in renewables needed

Actual and needed annual investment in power generation from renewables (US\$ bn)



Munich Re has leading expertise in the area of engineering and technology



Upcoming leap in investments means considerable potential for building and operating major plants



Enable: Performance-guarantee covers bring substantial relief for operators and investors



Invest: Supporting the climate transformation: ESG-focus investments total €7.3bn (€1.7bn in renewables)³



¹IEA World Energy Investment 2022 ²IEA World Energy Outlook 2021. Investment in renewable power generation in 2030 required in NZE 2050 Scenario

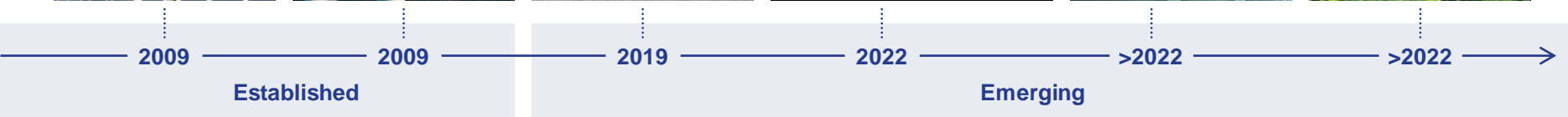
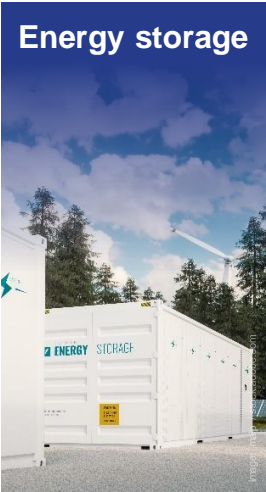
³Green bonds, renewables, certified real estate and forestry management, as of 31.12.2021. Renewable energy investments expected to increase to €3bn by 2025



Enable: Solutions for established and emerging technologies

Green Tech Solutions

For manufacturers, projects and investors



New deals in 2022 – dynamic market growth

Enable: Innovative insurance solutions to support sustainable growth of green hydrogen business



Product guarantee

Offers protection against excessive electrolyser repair costs.



Performance guarantee

Offers protection against underperformance in terms of H₂ production rate and efficiency.



Availability guarantee

Offers protection against insufficient availability of the electrolyser.

Thank you for your attention.

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