# ECONOMICS FOR DISASTER PREVENTION AND PREPAREDNESS

# EUROPE



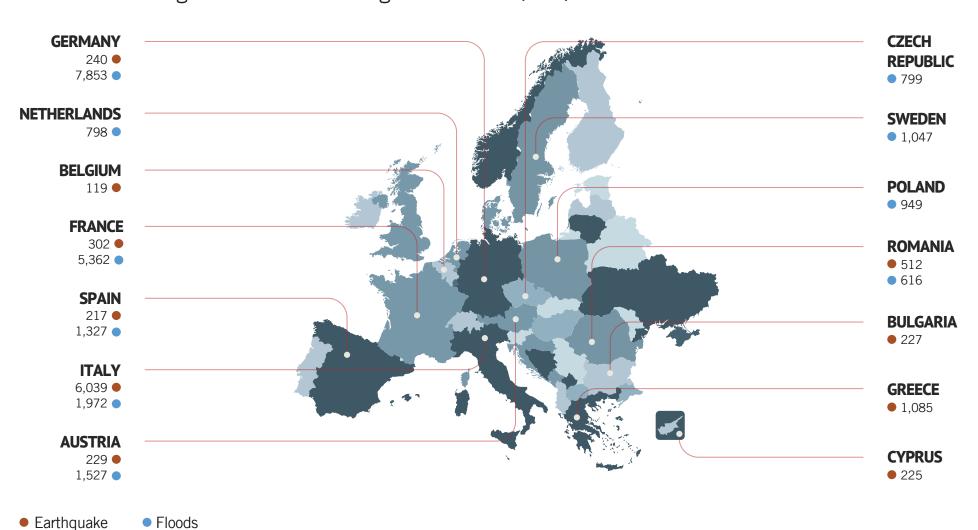




Historical Losses Between 1980 - 2020

## **FUTURE RISK IS SET TO INCREASE**

Countries with highest estimated average annual loss (AAL) in EUR Million



# WHILE SOME FINANCE IS IN PLACE, IT IS INSUFFICIENT TO COVER FUTURE LOSS



Each year, there is a 10% chance that Europe will experience earthquake and flood severe enough to exhaust reserves



Some countries in Europe can be liable to cover disaster costs of about 1% of GDP on average each year. A major disaster can create a liability of 17% of GDP in Europe



Only **30%** of countries in Europe have more than half of households insured against disaster risk





# THE BENEFITS OF RESILIENT INVESTMENTS ARE HIGHER THAN THE COSTS AND PROVIDE TRIPLE DIVIDENDS







Seismic resilience and energy efficiency programs (Europe & Romania) Educational buildings\*: Benefits of up to € 422 Million across the region Public buildings: Benefits 2 times higher than the costs nationally





# **SIGMA plan and Flandres EWS**

(Belgium) Integrated green and gray infrastructure and early flood warning: Combined net present value of around € 400 Million, 1 Million people benefitting



Wildland-urban interface (Portugal)\*
Benefits 2-3 times higher than the costs for ecosystems and communities, protecting people and infrastructure



Green roofs program (Vienna, Austria)\*
Net benefit of € 16 Million and enhanced quality of life (even with just 50% coverage)

\* Modelled case study (hypothetical investment)

74 Investments analyzed across Europe ranging from chemical hazards to droughts, earthquake, heatwaves, floods, landslides, oil spills, volcanic eruptions, wildfires, and nuclear hazards - the benefit-cost ratio almost always exceeded the threshold of '1'

### OPPORTUNITIES TO STRENGTHEN DISASTER PREVENTION AND PREPAREDNESS



#### **PHYSICAL**

- Promote policy reform to enable disaster prevention and preparedness.
- Invest in integrated and sustainable approaches to build resilience.
- Invest in evidence-based approaches to evaluate investments.



## **FINANCIAL**

- Develop a comprehensive disaster risk finance approach.
- Strengthen risk financing instruments, such as reserve funds (including at the EU level) and insurance.
- Improve data for financial resilience.



#### INSTITUTIONAL

- Invest in technical and human capacities of civil protection agencies.
- Improve the availability of risk information on disaster and climate risks.
- Share good practice and raise public awareness of the importance of investing in prevention and preparedness.



