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DESIGNING A JUST AND RESILIENT EUROPE

PROPOSALS FOR THE EU FRAMEWORK FOR CLIMATE RESILIENCE

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EXECUTIVE SUMMARY

Europe is facing increasing and intensifying climate risks, warming approximately twice as fast as the global average since the 1980s. As the summer of 2026 made it clear, the EU's and member states' current policy framework is not managing to close the adaptation gap in Europe, leaving people, ecosystems, sectors and assets at intolerable levels of risk. In response to growing public concern and mounting losses, adaptation to climate change is more than ever a necessity and is rapidly climbing up the policy agenda at the local, national and European levels. **A new ambitious, science-based and coherent policy framework is necessary to effectively respond to the challenges posed by climate impacts and avoid maladaptation and fake promises**. To achieve this, the European Commission (EC) has presented a proposal for an EU Framework for Climate Resilience that aims to step up action and effectiveness and puts forward the principle of resilience by design to prevent plausible high-impact risks and losses from the outset when designing policies, investments and other measures.

This policy study explores how new resilience policies can support a just and resilient Europe by synthesising current scientific, policy and civil society knowledge. The study first provides **key elements to inform resilience and adaptation policies**: (1) how climate risks are shaped by both physical and social dynamics; (2) how capacities differ between regions and local authorities play a key role in implementing adaptation measures; and (3) the weaknesses of the current EU adaptation governance. The study then **defines a vision for the EU based on the concept of a just resilience by design, adding justice as a key dimension for resilience**. To do so, it develops four resilience scenarios to question what we want to achieve through resilience policies; it provides a conceptual and legal foundation for the new EU framework for Climate Resilience, arguing for the need to establish a right to a habitable Europe; and it highlights how adaptation and resilience policies can support social progress in the EU through five equity tests.

Finally, the study **identifies and details 11 key policy recommendations for the EU Framework for Climate Resilience**:

1. Setting a measurable objective and success indicators
2. Ensuring a coherent, transparent and dynamic governance framework
3. Adopting a common European reference scenario and methodology for climate risk assessments
4. Making risk prevention the default option
5. Reducing social exposure and vulnerability
6. Implementing resilient land planning
7. Clarifying the notion of risk ownership
8. Penalising risk builders
9. Closing the funding and implementation gap through a just financing architecture
10. Confronting the reality of irreversible loss and damage
11. Supporting resilience globally

The overall objective of resilience must be to secure the right to a habitable Europe by preserving the ecological conditions that make dignified life possible for all its citizens, present and future, especially those most at risk.

1. INTRODUCTION

When remembering recent extreme weather events, such as the 2026 European heatwaves and wildfires, the 2026 Nepal-Tibet flash floods or the 2024 Valencia floods, the words of Climate Change Impacts Professor Hayley Fowler provide a key framing to understand where we stand today: "**It is sobering when you realise that this is the least extreme climate you will experience in your lifetime**" [1]. Climate change impacts are already felt in Europe, which has experienced an average warming of around 2.4 °C over the past five years, bringing with it diverse impacts. The continent has been warming approximately twice as fast as the global average since the 1980s and this rate of warming is expected to persist in the coming decades, which will lead to increasing impacts. [2]

The European Scientific Advisory Board on Climate Change is clear: "**Europe is experiencing rapid and profound changes in climatic conditions, often at a pace that challenges long-standing ways of living, working, planning, building and managing crises**". [3] Weather- and climate-related events in Europe have already caused a high number of human fatalities in the last decades, estimated between 85,000 and 145,000 between 1980 and 2020. The 2026 back-to-back heatwaves have caused an estimated 50,000 excess deaths in urban settings alone. [4] Direct economic losses due to weather and climate-related extremes are steadily increasing and have reached €40.5 billion in 2024 across the EU, with floods accounting for €31.1 billion of the total. The 30-year moving annual average for economic losses rose by 65% in 15 years, from €13.4 billion in 2009 to €22.0 billion in 2024. [5] While informative, these figures only report monetised direct damages to certain assets and do not account for productivity losses, increased mortality and worsened health, damages to cultural heritage or reduced ecosystems services. [6] If they did, the estimation of damages would be much higher and would still neglect the intangible losses that come with losing a cherished one, a home or a livelihood.

Without decisive action in terms of mitigation and adaptation, climate change is likely to create cascading effects felt everywhere in the EU, weakening productivity, economic growth and exports; restricting credit supply; increasing operating costs; and reducing tax revenues while simultaneously requiring higher public spending. [7] In the face of these intensifying impacts, the EU must equip itself with the necessary tools to prevent deaths, losses and costly disruptions, to reduce impacts and to repair damages. However, **current EU risk management and adaptation policies are insufficient to protect citizens and to address the conditions that (re)produce vulnerability and risks. New policies, improved processes and dedicated means must be put forward to meet this challenge**. Beyond responding to climate change, ambitious and well-designed resilience and adaptation policies also constitute a catalyst for positive social change by improving the quality of life of all citizens in Europe, from health to access to nature.

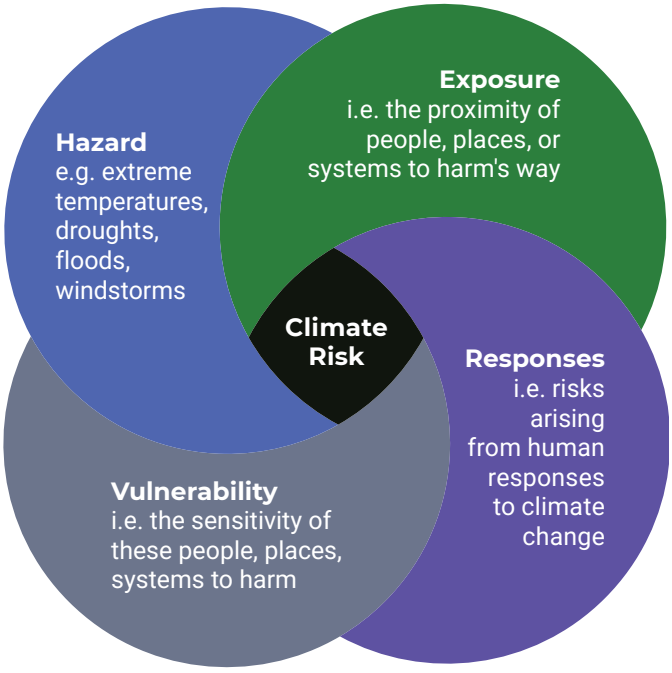
The present policy study first synthesises available information on the current state of adaptation and resilience in the EU, highlighting challenges that must be taken into consideration in policy making. It then provides a vision to develop a just resilience by design in the EU, defining key elements. Finally, the study proposes 11 concrete recommendations to ensure that EU policies address essential challenges.

2. EUROPE'S GROWING ADAPTATION CHALLENGE: A REMINDER

2.1 Understanding climate risks in the EU

To design effective resilience and adaptative policies, understanding how climate risks are shaped is an essential first step. Climate risks are the function of four intertwined factors: natural hazards themselves; channels of exposure to hazards; levels of vulnerability to harm; and the adequacy of the response to risks (Figure 1).

Figure 1: The concept of climate risk



Source: adapted from Simpson et al. (2021).

The underlying social drivers of exposure, vulnerability and response play a significant role in shaping climate risks. Poverty, especially when it is concentrated in an area, is a key driver of exposure and vulnerability to climate change, increasing sensitivity to harm and reducing people's capacity to prepare, cope, recover and adapt. [8] In 2025, one person in five – or 92.7 million people – was at risk of poverty or social exclusion in the EU. [9] Ten regions had a share of people at risk of poverty ranging from 30.0% to 41.4% in 2024.[10] Lower-income households (especially single-headed by females) and marginalised groups are more likely to live or work in places exposed to heat, prone to floods or environmentally degraded, often in poorer-quality housing and with less green space and access to services. For example, in Bulgaria, Greece, Italy and Spain, people in the lowest income group were twice as likely to report being uncomfortably hot at home during summer as people in the highest income group. [11]

In addition to poverty, specific population groups such as people in poor health, the elderly, children and people with disabilities are more vulnerable to climate hazards. Beyond physical vulnerability linked to difficulties in thermoregulation, hydration or self-protection, certain groups may have a harder time recovering from climate-related shocks and might face prolonged post-traumatic stress disorder due to preexisting physical and mental health conditions or age. [12]

Poverty, demographic characteristics and health can also lead to a lower adaptive capacity to climate change impacts and, thereby, increase risks. Due to a lack of savings, insurance and insecure tenure, poor households are less able to finance cooling, retrofit homes or buy insurance. Households that are driven to more-at-risk places because of cheaper housing prices cannot afford to relocate. This leads to compounded risk in some areas. In some member states, local administrative units with higher unemployment rates tend to combine larger areas at risk of flooding and lower insurance coverage. [13]

While there is solid evidence that poverty and inequality contribute to increased impacts of climate change, there is also emerging evidence that **repeated climate shocks might contribute to worsening inequality over time in Europe**. A recent study covering 2004-2022 estimates that heatwaves and droughts increased Europe's at-risk-of-poverty rate by 1.7%, or roughly 303,900 people annually, with income losses substantially larger for the poorest quintile than for the richest.[14] For groups already experiencing deprivation, a heatwave, flood or drought can therefore have compounded effects: loss of power may remove cooling or medical support; transport disruption can prevent access to work, healthcare or evacuation; and disruption to water, care or social-protection services can deepen poverty and exclusion.

Over time, especially if hazards are becoming more frequent and severe, households may never recover, especially in terms of assets (if uninsured) or other key essential capacities necessary to absorb further shocks. A study of the 2013 German floods showed that around 20% of participants still reported being highly affected by the disaster after four years, with estimated long-term welfare losses equivalent to roughly 5-10% of self-reported wellbeing.[15] A survey of 593 households flooded in different parts of Scotland, conducted between one and twelve years after the event, found that the social differentiation of impacts widened over time with low-income households reporting greater long-term impacts and less recovery than higher-income groups. [16]

Major assessments have already been conducted to identify climate risks and understand their dynamics in Europe. One of the most comprehensive ones, the European Climate Risk Assessment produced by the European Environment Agency (EEA), identified and **assessed 36 major climate risks for the continent, grouped into five broad clusters: ecosystems; food; health; infrastructure; and economy and finance**. [17] Each risk alone has the potential to cause significant environmental degradation, economic damage, social emergencies and political challenges. 21 of the risks require more action immediately, with eight requiring urgent action:

- coastal ecosystems affected by erosion, flooding and permanent inundation due to the combined effects of sea-level rise, storm surges and embankment due to coastal infrastructure;
- marine ecosystems, threatened by the combined effects of climate change (marine heatwaves, acidification, etc.) and other anthropogenic threats (pollution, fishing, etc.);
- biodiversity and carbon sinks threatened by wildfires, especially in southern Europe;
- crop failures and reduced yields owing to heat, drought, water scarcity and extreme events, especially in southern Europe;
- heat stress for the general population, with heightened risks for ageing groups and for outdoor workers, particularly in southern Europe;
- health risks and destruction of the built environment and infrastructure due to wildfires, especially in southern Europe;
- pluvial and fluvial flooding affecting infrastructure, built environment, people and economic activity; and
- European solidarity mechanisms threatened by various costly hazards.

In many instances, southern Europe, low-lying coastal regions and the EU's outermost regions are hotspot regions for climate risks and climate risks are compounded by other anthropogenic pressures on the natural environment. Addressing the increasing number of hazards affecting Europe and the underlying social drivers of climate risks is urgently needed considering the long time horizon for planning and implementing actions that effectively reduce the net risk.

2.2 European adaptation capacities: the importance of a locally relevant approach

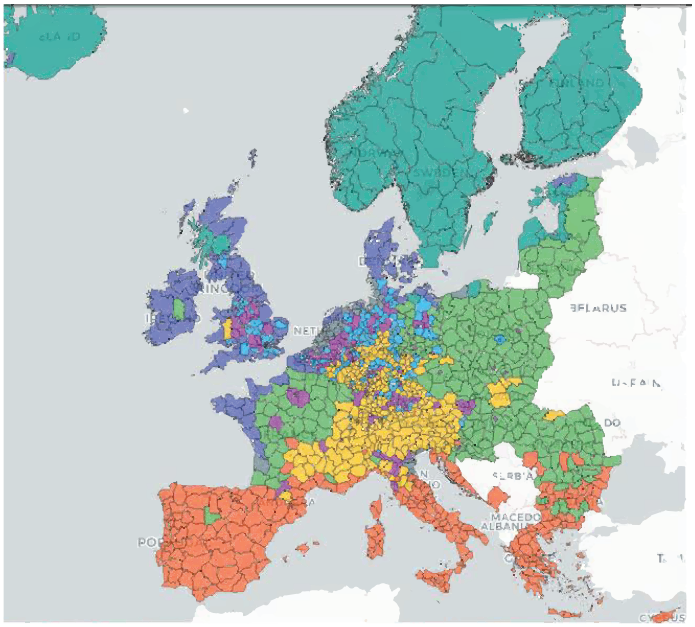
The determining factors of climate risks discussed above are often shaped at a regional or local level,

reflecting the interactions between specific forms of ecosystem and landscape management, economic development, socio-political organisation and culture. In addition, many, if not most, adaptation actions are ultimately implemented at regional and local levels where people, assets, ecosystems and essential services are exposed. **Local authorities, therefore, form the "bedrock" of the adaptation and resilience infrastructure**: municipalities and regions are in charge or have a profound influence on the land-use, infrastructure, housing, public-health, water, emergency-management and social-service decisions that determine whether climate hazards become disasters. Local authorities are also crucial for raising awareness and influencing the behaviours of citizens to prevent and respond to risks. [18]

Not all countries have the same capacity to adapt and, within countries, differences in adaptive capacities exist as well. According to the latest available ND-GAIN Country Index data, [19] which ranks countries in terms of climate vulnerability and readiness, Finland is the second-best performer in the world in terms of net resilience, while Bulgaria is the lowest-ranked EU member state at the 46th place. While looking at the national level already provides a first insight into the differences in adaptive capacities within the EU, it is essential to disaggregate risk at a more granular level to define geographical areas that face similar hazards and have comparable levels of exposure as well as social vulnerability profiles. Such a granular understanding of risks is critical to adapt to local realities and define differentiated needs.

For example, the European project RESIN – Climate Resilient Cities and Infrastructures [20] defined a **climate risk typology based on data at NUTS2 level**, which helps understand the need to define locally-relevant adaptation pathways and correlating funding streams and governance systems which might cross administrative boundaries. The map below (which does not include outermost regions) shows the eight types of climate risks identified in Europe.

Map 1: European climate risk typology developed by RESIN – Climate Resilient Cities and Infrastructures



Source: Carter, J.G., S. Hincks, V. Vlastaras et al. (2018) "European Climate Risk Typology".

Inland and urbanised (purple): fluvial flooding, combined with substantial critical infrastructure and urban exposure. Comparatively affluent, innovative and well provided with infrastructure, which may strengthen adaptive capacity.

Inland hinterlands (bright green): multiple climate hazards, notably exposure to fluvial flooding; compared with other classes, with lower GDP and lower projected migration.

Northern lands (forest green): coastal-hazard exposure, cool and wet conditions, and a projected increase in very heavy rainfall events. Generally affluent and demographically dynamic, with higher projected migration.

Southern lands (orange): shift towards hotter, drier conditions, with important landslide and coastal hazards. Comparatively limited critical-infrastructure provision and economic challenges, which can compound climate risk.

Northwest (lavender): densely populated, high exposure to coastal hazards, while exposure to other climate hazards is comparatively less prominent; migration is projected to increase.

Land locked and elevated (yellow): landslides and fluvial flooding, alongside a projected rise in very heavy rainfall; dense transport infrastructure at significant risk of disruption and exposure, despite relatively strong economic and innovation capacity.

North West urban (blue): low direct hazard exposure, projected to experience more very heavy rainfall; GDP and employment prospects are above the European average.

Lowlands and estuaries (grey): high exposure to both fluvial flooding and coastal hazards. Stronger economies and good provision of critical infrastructure may support adaptation, significant assets and systems potentially exposed.

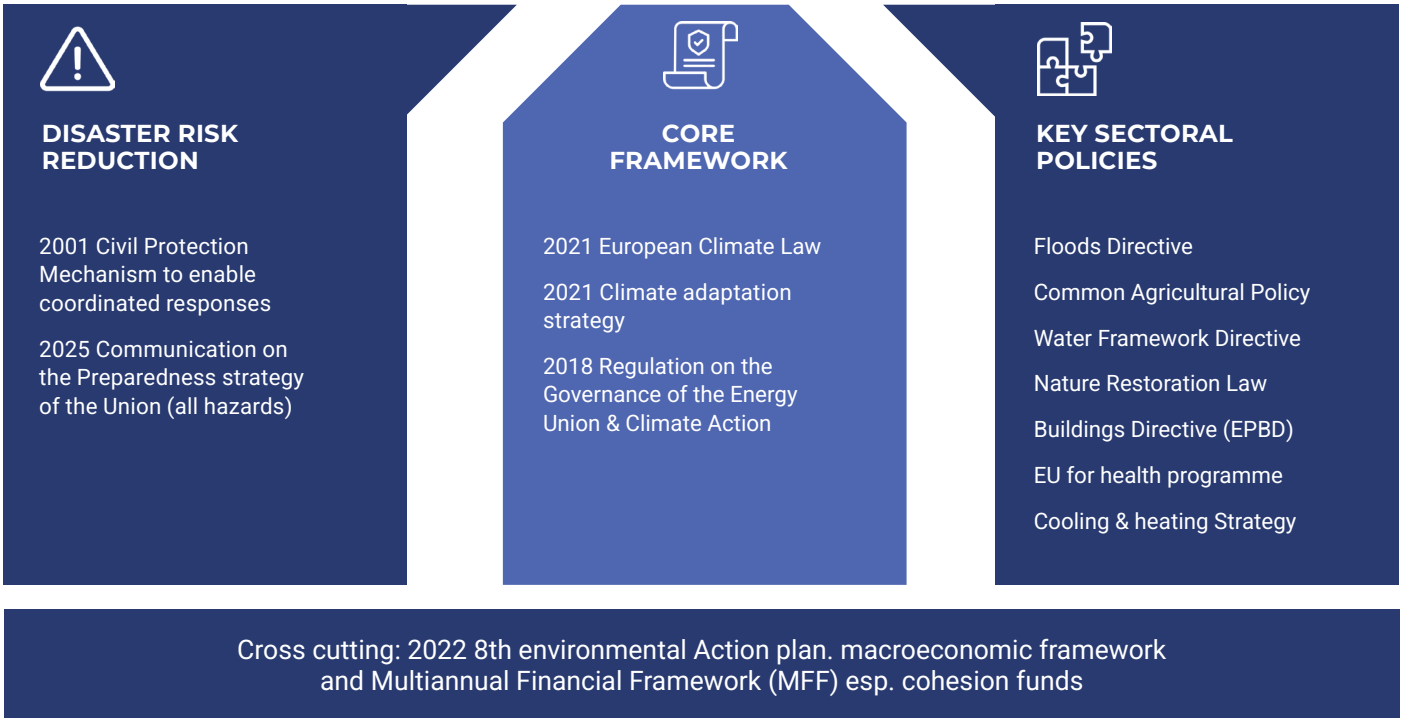
Faced with a diverse set of risks, local authorities also have very different institutional and fiscal capacities, levels of autonomy or infrastructure quality across the EU. For instance, fiscally distressed cities, small municipalities with thin administrations, fragmented-governance territories or municipalities already constrained by disaster recovery have a much lower adaptive capacity across the adaptation policy and funding cycle. To effectively reduce climate risks, the differentiated exposure, vulnerability and capacities of European territories need to be taken into account. Overall, an effective resilience strategy to climate change requires an **integrated whole-of-government and whole-of-society approach that coordinates action across sectors and levels of governance** – from local and regional authorities to national governments and supranational institutions – because climate risks and adaptation responsibilities cut across administrative boundaries and policy domains. [21]

2.3 A European policy architecture that leaves people at intolerable levels of risk

Climate resilience and adaptation require a diverse toolbox of policies: some focusing on climate change impacts, some mainstreaming adaptation across policy areas and others supporting adaptation by addressing the underlying socio-economic drivers of climate risks. **The EU has put in place an ensemble of policies and strategies to adapt to climate change**. As shown in the figure below, the core policies of the EU climate adaptation/resilience governance consist of the 2021 European Climate Law, the 2021 Climate Adaptation Strategy and the Governance Regulation. These are complemented by disaster risk reduction policies and key sectoral policies.

- The **2021 European Climate Law** aims at "enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change", in line with the global goal on adaptation established in Article 7 of the Paris Agreement. It sets a legal obligation for member states to "adopt and implement national adaptation plans based on robust climate and vulnerability analysis". [22]
- The **2021 Climate Adaptation Strategy,** a communication from the EC, attempts to operationalise the legal obligation of the Climate Law by improving knowledge and data, supporting policy development and climate risk management at all levels, and accelerating adaptation action across the board. The Strategy focuses on supporting member states in the formulation and implementation of their national adaptation strategy and on mainstreaming adaptation within the European Green Deal initiatives (such as the Biodiversity Strategy, Renovation Wave, Farm to Fork Strategy and so on).
- The **Regulation on the Governance of the Energy Union and Climate Action** (commonly referred to as the Governance Regulation) defines the rules governing reporting mechanisms for member states, with obligations to report every two years on the "main goals, objectives and institutional framework for adaptation, climate

Figure 2: The EU adaptation policy, funding and strategy landscape



change projections, including weather extremes, climate-change impacts, assessment of climate vulnerability and risks and key climate hazards, adaptive capacity, adaptation plans and strategies, monitoring and evaluation frameworks and progress made in implementation, including good practices and changes to governance". [23]

Adaptation and resilience policies are closely linked with different policy areas. EU frameworks pertaining to disaster risk reduction for all hazards (not just those related to climate change) and adaptation are complementary to each other. Several sectoral policies also set legal obligations that are directly or indirectly relevant to climate adaptation. For instance, the Floods Directive [24] requires climate-adjusted flood maps, while the Water Framework Directive [25] includes relevant obligations for member states, such as preventing deterioration, achieving good water status, managing abstraction and maintaining river-basin planning. The Nature Restoration Law, [26] which includes binding 2030/2050 targets, requires member states to take into account the following elements in their nature restoration plans: the changing climate; the potential support to adaptation that nature restoration can provide and synergies with national adaptation strategies or plans; and national disaster risk assessment reports. While disaster risk reduction, sectoral policies and adaptation are complementary, they currently lack integration and coherence, leading to a dilution of responsibilities amongst many duty bearers.

The resulting EU adaptation patchwork has, so far, not delivered the necessary results, with current adaptation actions "insufficient to prevent avoidable impacts and to manage escalating climate risks". [27] **Four main policy issues are commonly identified as hindering adaptation and resilience in the EU**.

A lack of targets

High-quality adaptation targets that clearly signal necessary actions constitute key tools to "clarify priorities, direct resources and strengthen enabling

conditions for delivery". They can also promote transparency and accountability, allowing for corrections when progress is insufficient. [28] However, the EU's Adaptation Strategy does not include clear targets, which was flagged as a major concern by the European Parliament resolution on the Strategy. [29] The broad 2030 objective for adaptation contained in the subsequent 8th Environment Action Plan (EAP) similarly fails to set clear targets, vaguely requiring

> "continuous progress in enhancing and mainstreaming adaptive capacity, including on the basis of ecosystem approaches, strengthening resilience and adaptation and reducing the vulnerability of the environment, society and all sectors of the economy to climate change, while improving prevention of, and preparedness for, weather- and climate-related disasters." [30]

The Advisory Board considers that the lack of measurable adaptation targets limits EU adaptation planning and reporting, arguing for cross-cutting adaptation targets to support a clear vision for a climate-resilient EU by 2050. [31]

A lack of prioritisation by member states, made worse by the lack of a common reference framework

In a general context of backlash against climate policies, global pandemic and cost-of-living crisis, it appears that adaptation has not been high in the priorities of member states, despite increasing risks, losses and costs. For instance, only 6% of Recovery and Resilience Facility funds were allocated to climate change adaptation. [32] While progress has been recorded on risk assessments, legal foundations and planning, little evidence demonstrates effective improvements in adaptation and resilience.[33] The European Court of Auditors also found that reporting from member states remains largely descriptive. Data gaps, different definitions, the lack of rigour in terms of methodology to track funding and the absence of common indicators for measuring progress has made it virtually impossible to assess progress on the ground.[34]

A glaring implementation gap at the subnational level

The implementation gap is particularly acute at subnational level. Subnational authorities face many barriers to adaptation, often linked to a lack of resources, capacities, long-term planning and coordination.[35] In a survey used by the Court of Auditors, almost 70% of municipalities in the sample were unaware of the EU adaptation strategy, 60% were unaware of national adaptation plans, and 54% were unaware of regional plans, while only 16% had adopted a local adaptation plan.[36] Projects on the ground hint at a risk of maladaptation, as they focus on short-term expediency rather than long-term solutions. Examples include:

- promoting irrigation expansion instead of switching to less water-intensive crops;
- investing in artificial snow cannons instead of focusing on year-round tourism; and
- favouring the construction of dykes or beach sand filling instead of relocating residents or tourism facilities at risk of flooding or erosion in coastal areas.

The effectiveness of the EU Adaptation Strategy at subnational levels is also hampered by policy incoherence. For instance, the Common Agricultural Policy (CAP) subsidises risk-enhancing activities, such as payments for water-intensive crops in water-stressed areas. [37]

A fragmented funding landscape failing to deliver increased levels of net resilience

It is very hard to estimate climate-adaptation investment needs in Europe. Existing figures for 2021-2030 range from €35–62 billion per year under a narrow scope to €158–518 billion per year under a wider scope. [38] The Communication on the EU Framework for Climate Resilience estimates investment needs €70 billion per year. Meanwhile, the Court of Auditors estimated **directly identifiable cumulative EU budget adaptation funding at around €26 billion for 2021-2027, or 3.7 billion annually**. [39]

Due to the absence of common definitions, there is no aggregate figure of adaptation spending by member states.

Despite the importance and the urgency of adaptation, there is still no dedicated long-term EU adaptation funding stream with a strong outcome-based accountability architecture. Instead, adaptation funding exists across multiple EU instruments (cohesion, agriculture, research, infrastructure, recovery instruments and the European Investment Bank ecosystem). This fragmentation has practical consequences. When funding is cross-cutting but poorly tagged, it becomes difficult to distinguish between projects that merely mention adaptation and those that materially reduce exposure, vulnerability or service disruption over time. The result is not only underinvestment, but also weak strategic steering: policymakers cannot easily see whether resources are reaching the most exposed territories, the most socially vulnerable groups or the ecosystems that provide critical buffering functions.

In addition, the macroeconomic framework of the EU does not provide sufficient guidance to fill the adaptation gap. The macroeconomic imbalance prevention (MIP) indicator dashboards do not cover climate adaptation. The reformed fiscal framework provides some conditional flexibility for the "green transition and resilience", but no general exemption for nationally financed climate-adaptation investments. While acknowledging climate-related fiscal risks, the European semester falls short of integrating adaptation and physical climate risks into economic coordination and surveillance. Finally, the taxonomy under the delegated act implementing the sustainable finance strategy explicitly covers adaptation but lacks climate-risk assessment and interpretative, context-specific, guidance to support effective implementation of its technical criteria.

3. DEFINING A JUST RESILIENCE BY DESIGN PATH FOR EUROPE

3.1 What future do we want? Four scenarios to 2040

Human-induced global warming is close to reaching 1.4 °C, with Europe warming roughly twice as fast as the global average since the 1980s. [40] Considering current policies, exceeding the objective of the Paris Agreement of a 1.5 °C global warming is now considered unavoidable, with the most optimistic scenario estimating a warming of 1.8 °C. Nevertheless, scientific experts consider that it is still possible to overshoot 1.5 °C for several decades, then bring back global temperatures to a 1.5 °C warming, if deep and rapid emissions cuts occur. **The current level of warming is already creating unsafe conditions in many places and every additional tenth of degree will lead to significant and often irreversible impacts.** [41] These facts mean that reducing emissions fast is of the utmost importance and that societies must prepare and adapt to climate change impacts.

These drastic changes in mean temperatures, precipitation patterns and weather extremes, **will occur at the same time as many other relevant trends affecting Europe's exposure, vulnerability and capacity to respond** (Table 1).

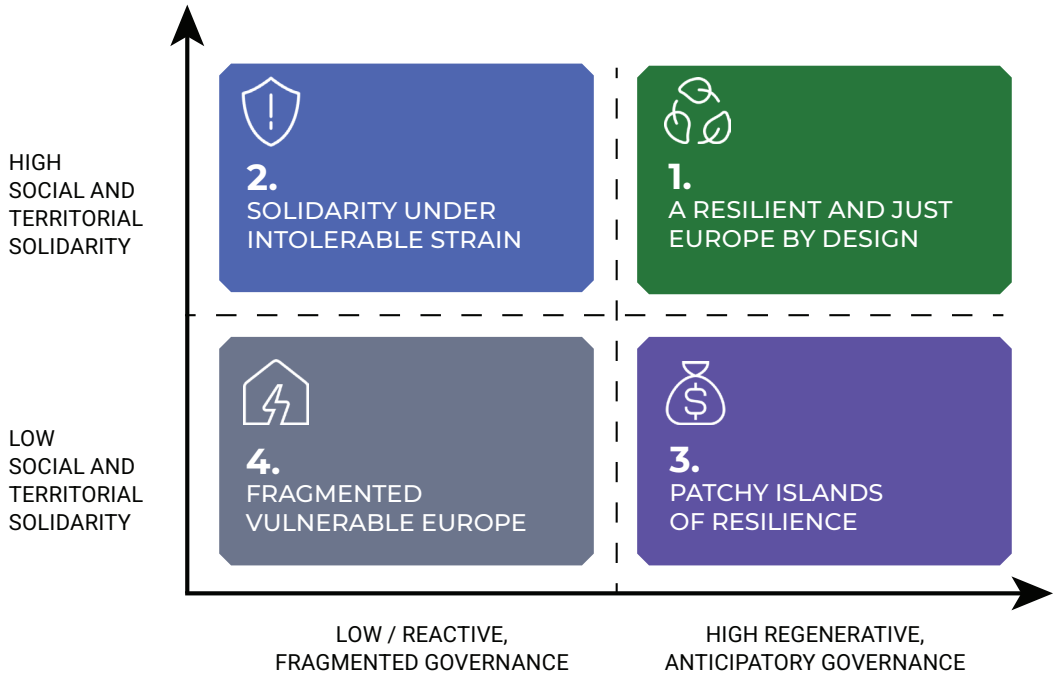
Table 1: Key trends of relevance to the European 2040 horizon

Trend	Impact on Europe's resilience and adaptation pathway
Demography: Europe's population ages and declines in absolute terms, as a result of declining birth rates; immigration flows will not compensate for the shortfall in births.	An older, shrinking workforce reduces the tax base, local-government capacity and availability of care, health, construction and emergency-response workers precisely as climate impacts increase. Ageing also raises heat, flood and service-disruption vulnerability, making resilient housing, cooling, care continuity, accessible evacuation and targeted social protection central to the adaptation infrastructure.
Society: societal tensions are intensifying due to multidimensional inequality and technology-driven changes in the labour market.	Climate hazards are likely to compound disparities, producing a sharper divide between those able to insure, cool, retrofit, relocate and recover and those unable to do so. Unless adaptation is redistributive and participatory, regressive costs, unequal protection and climate-related displacement may deepen mistrust, polarisation and resistance to collective action.

Trend	Impact on Europe's resilience and adaptation pathway
Technology: the deployment and adoption rates of new technologies are accelerating.	Climate services, early warning systems, satellite monitoring, and AI-enabled risk assessment can improve anticipation, targeting and delivery of adaptation. However, uneven access, exclusion from digital services, biased data and private control of critical information may reproduce vulnerability unless systems are interoperable, publicly governed and designed for accessibility.
Economic challenges: geopolitical fragmentation, the transition to climate neutrality and an ageing Europe impact the nature and speed of economic growth	Persistent climate losses, disruption to productivity and supply chains, and high resilience-investment needs will shape growth, the health of public finances and competitiveness. Territorial divergence may widen as more exposed and lower-capacity regions struggle to finance prevention and recovery, while resilient firms and places gain advantage through secure water, energy, skills, infrastructure and insurance.
Energy transition: global energy consumption is rising, and so is the use of fossil fuel – despite the increasing share of energy generated by renewables and their falling costs.	Adaptation must strengthen the energy-system resilience against climate impacts in a way that accelerates the transition, while ensuring affordable energy and cooling for all.
Geopolitics: increasing competition and friction continues, accompanied by increasing fragmentation and the emergence of new threats.	Europe's adaptation capacity will be dependent on its capacity to secure diversified critical supply chains, maintain international cooperation, and exercise solidarity with exposed neighbouring regions.
Democratic governance: political polarisation risks weakening democracy, which is also experiencing sustained organised attacks by authoritarian forces.	Polarisation can delay prevention, undermine trust in risk information and the equity of the response, weaken public institutions, and make long-term investments politically difficult.

Source: trends featured in ESPAS (2024) Global Trends to 2040: Choosing Europe's Future; impacts on resilience and adaptation pathways from the author.

Figure 3: Just resilience scenarios to 2040



Considering these trends, policy lessons to date and in line with the need for social, territorial, intergenerational and interspecies equity, the study proposes **four possible scenarios based on two determining factors (Figure 3)**:

1. the EU's capacity and willingness to address vulnerability and inequality to safeguard social and territorial solidarity in the face of increasing risks; and

2. the ambition of the EU's climate adaptation policies, ranging from a coherent and integrated strategy prioritising prevention, mitigation and regeneration to a minimalist, fragmented and reactive approach merely coping with ex-post reconstruction and loss compensation.

In the most equitable scenario, **a just and resilient Europe by design (1),** the EU focuses on effective risk reduction and treats social, territorial and ecological cohesion as a single resilience objective. The 3 °C reference scenario, alongside renewed mitigation efforts, is embedded in EU fiscal, cohesion, housing, health, water, agriculture, infrastructure and restoration decisions; adaptation funding follows a transparent formula that weighs climate exposure, social vulnerability and local delivery capacity. Nature restoration is implemented at catchment, landscape and seascape scale, connecting floodplains, wetlands, forests, soils, coastal buffers and urban green infrastructure with jobs, health, water security and local livelihoods.

In the worst scenario, **a fragmented vulnerable Europe (4)**, adaptation is dominated by emergency response, with a very selective protection of strategic assets and private self-provision. Nature-restoration targets are missed, worsening drought, heat, flood, fire and water-quality risks. Regions with weak fiscal capacity or declining populations experience a cycle of underinvestment, asset deterioration, out-migration and declining political voice. Insurance coverage contracts; local public services weaken; and lower-income households bear rising costs for food, water, cooling, housing repair and health.

In the middle scenarios (2 and 3), Europe faces impossible ethical choices. On one hand, solidarity is considered a priority but faces intolerable strain

as social expenditure increasingly compensates for preventable damage, diverting funds away from other essential investments, with many places reaching adaptation limits. On the other, inequality dominates and resilience becomes a luxury, with wealthier cities, regions, firms and property owners mobilising capital, insurance and expertise to adapt while lower-income regions and households struggle to finance adaptation and face displacement, insurance withdrawal or unequal access to services, leading to increased territorial divergence and greater inequalities.

Whether the EU becomes just and resilient or fragmented and vulnerable by 2040 will depend on political choices regarding social and territorial solidarity and regenerative and anticipatory governance, as well as coherently factoring in the key trends mentioned above.

3.2 A science-based and human rights-based approach to resilience

The EU Framework for Climate Resilience proposed by the European Commission consists of a communication and a draft regulation called the Climate Resilience Law. It will be complemented by a strategic plan on climate resilience in 2028, as well as other thematic strategies and initiatives including a European Heatwave Plan, a Climate Insurance Alliance, a European Water initiative and an initiative to identify 100 most climate-vulnerable territories in the EU. **The approach to resilience that transpires from these documents raises several concerns.**

First, the draft Climate Resilience Law adopts an incomplete version of the definition of resilience of the Intergovernmental Panel on Climate Change (IPCC): "the capacity of interconnected social, economic and ecological systems to withstand a hazardous climate event, climate trend or climate disturbance, responding or reorganising in ways that maintain their essential function, identity and structure". [42] The draft Law leaves out the second part of the IPCC definition which clarifies that "resilience is a positive attribute when it maintains capacity for adaptation, learning and/or transformation".[43] This second part is essential and reflects decades of scientific reflections on the purpose and limits of resilience. These reflections highlight that resilience should not simply mean returning to a "normal" situation but also learning and, when necessary, transforming systems.[44] In line with these scientific advances, the EC's own Joint Research Centre also highlights a transformative resilience, which "calls for policies that facilitate bouncing forward towards a better and more sustainable pathway from an economic, social and environmental point of view".[45]

With this incomplete definition, the draft Law suggests a reactive or narrow approach to resilience that does not seek to address the underlying dynamics that create vulnerability. Instead, the definition of resilience should be aligned with with the latest scientific developments. A definition fit to address the climate risks faced in Europe would, for example, be the following: the "capacity of interconnected provisioning systems to continue meeting essential needs through shocks and longer-term change, while adapting, reorganising and transforming the conditions that create or transmit vulnerability and risk". [46]

Secondly, the considerations on justice in the proposed framework are limited. According to the EC's definition, just resilience means "ensuring that people in vulnerable situations and regions and communities disproportionately impacted by climate risks are taken into account when developing and implementing policies and measures with implications on climate resilience". However, merely "taking into account" vulnerable groups and regions does not fulfil the four dimensions widely considered as constitutive of climate justice: recognitional, distributional, procedural and restorative justice.[47] The EC's Communication briefly mentions the distributional dimension by stating that it is "important to tackle th[e] uneven distribution of climate risks and help ensure that all people, regions and communities benefit equally and fairly from climate resilience measures". The only concrete initiative proposed in the Framework is that the EC "intends" to develop a "common methodology for assessing distributional impacts and preparedness in social protection systems". Otherwise, weak

language is used where "[t]he framework would also encourage targeted support for people in vulnerable situations, regions and communities disproportionately impacted by climate risks with a view to promoting the principle of just climate resilience". Overall, the proposed framework is far from establishing obligations on member states and rights for citizens that would support justice.

To remedy this weakness, the framework should adopt a "just resilience by design" approach anchored in human rights and that translates into a clear obligation to equitable protection or outcomes. A human-centred approach is essential for ensuring that resilience does not become a narrow exercise seeking to safeguard strategic productive, military and financial assets while allowing vulnerable people, precarious territories and ecosystems to shoulder losses in a way that violates their rights and hurts their wellbeing. Instead, just resilience by design must preserve the ecological conditions that make dignified life possible for all its citizens, present and future, by preventing all plausible high-impact risks and losses to people and assets, beyond monetised material risk to capture non-economic losses including risks to life, health, culture and way of life. Just resilience must also go well beyond acknowledging vulnerability by prioritising those facing the greatest risks and the least capacity to adapt, ensuring affordable access to essential services, and demonstrating that adaptation measures reduce – rather than reproduce or deepen – inequalities.

Such an approach would be consistent and coherent with human rights and climate change obligations of states. Indeed, the UN recognised in 2022 that the right to a clean, healthy and sustainable environment is the right of all human beings to the environmental conditions – clean air, safe water, healthy ecosystems, a non-toxic environment and a safe climate – necessary to live with dignity and enjoy their other human rights [48]. In the 2024 *Verein KlimaSeniorinnen Schweiz and Others v. Switzerland* litigation case, the European Court of Human Rights held that Article 8 of the Convention encompasses a right to effective protection by state authorities from the serious adverse effects of climate change on life, health, well-being and quality of life. The landmark Advisory Opinion on the Obligations of States in Respect of Climate Change delivered by the International Court of Justice in 2025 further clarified that states have legally binding obligations to implement adaptation actions to prevent and address foreseeable climate hazards and vulnerabilities, highlighting that climate change impacts may "significantly impair the enjoyment of certain human rights". [49]

For European policy makers, this implies that adaptation cannot be treated as a discretionary or purely technocratic domain; it must be understood as a matter of enforceable rights of prevention and fair distribution of protection, especially for populations, generations, regions, ecosystems and sectors most at risk. Building on legal norms and precedents, this study proposes to introduce the **right to a habitable Europe for all its people, now and in the future**. Developed by Morizot and Neyret, the right to a habitable planet constitutes a precondition for the exercise of all other fundamental rights (life, property, liberty, health, family life and participation). [50]

3.3 Just resilience: a catalyst for social progress in a habitable Europe

As explained above, a just climate resilience goes beyond simply responding to climate hazards; it is a societal objective that requires acknowledging human rights and transforming systems. Reductionist approaches to resilience and adaptation risk failing because they leave the underlying drivers of vulnerability intact. While social protection and safety nets are indispensable, they are not insufficient to absorb the consequences of climate change on households and cannot substitute for structural change. Moreover, climate impacts are just an additional factor affecting care systems that are already in crisis in Europe, a crisis linked with multidimensional inequality, prolonged austerity and underinvestment and compounded by a changing burden of diseases, changes in family structures and ageing. [51] **Instead of seeking to restore a flawed status quo that reproduces**

vulnerability, just and well-designed resilience and adaptation policies can be a catalyst for social progress in Europe: reshaping care systems, housing, infrastructure, public services and access to resources to strengthen people's capabilities and advance wellbeing for present and future generations, rather than simply helping them endure worsening conditions. [52]

In line with this approach, a coherent policy mix of prevention, preparation, protection, promotion and transformation is needed. Along with addressing the underlying drivers of vulnerability, **prevention, which aims at "reducing the incidence and size of shocks and, in the best case, to avert them",[53] is a key priority to protect human rights and avoid unbearable costs**. Indeed, no emergency response or insurance scheme will compensate for the loss of life, of a home, a way of life, a livelihood or an essential ecosystem. However, the proposed EU framework gives very little attention to prevention. Achieving a just resilience by design cannot be limited to compensation after disaster, merely implementing measures to absorb shocks without seeking to avoid their occurrence in the first place. In addition to reducing risks and losses, prevention also often offers important social, economic and environmental co-benefits when taking the form of nature-based solutions. For example, natured-based flood prevention measures, which may include restoring river basin ecosystems, may also provide benefits in terms of biodiversity, groundwater recharge and recreation. [54] It is estimated that adapting to increasing coastal flood risks in the EU would deliver €6 for every euro invested. [55]

Finally, a just resilience that serves social progress can only be achieved if responsibilities are clearly identified and defined. It is necessary to identify who is responsible for what for each type of action in the adaptation cycle (from risk assessment to implementation). This clarity is essential for the effective implementation of adaptation as most major climate risks for Europe identified are "co-owned" by the EU and its Member States and may involve further sub-national levels. Another key element in this process is to differentiate between individual and collective responsibilities. There is a risk to push responsibilities on households or taxpayers which are not in line with their role in the origin of the problem nor with their capacity to mitigate risks. For instance, it is estimated that around 52 million people, approximately 12% of Europe's population, live in potentially flood-prone areas. Due to broader socio-economic dynamics, older or unemployed people may be overrepresented in some of these areas, people for whom the cost of private catastrophe insurance might prove prohibitive. [56]

Box 1 summarises the just resilience by design approach presented in this study through five equity tests for EU policies.

Box 1: Five equity tests for EU climate resilience policies

To deliver habitability for present and future generations, irrespective of gender, age, race, occupation, place and socioeconomic status, EU policies must pass the five following equity tests.

Equity test 1: Prevention first

Preserving the ecological conditions that make dignified life possible implies a focus on prevention rather than response. This requires acting coherently on three fronts: adaptation, mitigation and nature restoration. Win-win preventive actions, such as nature-based solutions, are priorities.

Equity test 2: Tackling the underlying drivers of vulnerability

As reducing hazards is not sufficient, a second priority for achieving just resilience by design must be to address underlying drivers of social vulnerability by addressing material deprivation and poverty, unsafe housing, weak access to care, inadequate cooling, water insecurity and unequal recovery capacity in line with Sustainable Development Goals and the European Pillar of Social Rights.

Equity Test 3: Continuity of essential public services

Policies should guarantee the continuity of essential public services under future climate stress, especially in health, care, water, transport, energy and communications. This means addressing institutional factors of vulnerability, including the lack of capacity of local authorities, the crisis in the care infrastructure and societal trends, which together with climate stress will severely increase the need for care.

Equity Test 4: Locally relevant solutions

Given that countries and regions of Europe face very different risks in terms of their nature and severity, just resilience by design means defining the maximum level of divergence in terms of the net resilience of territories and from that designing locally relevant solutions. Within this test, the specific situation of outermost regions must be duly considered.

Equity Test 5: Meaningful citizen participation

All dimensions of justice, including procedural and recognitional, must be respected, so that those most exposed and least protected can have a say in shaping decisions and receive the protection they need.

4. POLICY RECOMMENDATIONS

Considering the needs identified for EU adaptation and the vision for a just resilience by design, the proposed EU Framework for Climate Resilience should include the following components.

Setting a measurable objective and success indicators

The current proposed framework includes a vague objective to enhance resilience but does not include clear targets, and it leaves member states responsible for deciding what tolerable levels of risk are. **A tangible objective backed by measurable protection standards** is necessary to set ambition, track progress on the ground and evaluate the distance to target. By 2040, every member state and the EU as a whole should demonstrate the effective protection of the right to a habitable Europe for present and future generations through policies aiming at:

- a sustained reduction in climate-attributable deaths, illness, forced displacement, livelihood loss and essential-service disruption;
- the elimination of gaps in protection for high-risk people, ecosystems and regions;
- accessible citizen participation, accountability and remedy in adaptation and disaster-management decisions; and
- a 90% emissions reduction compared with 2019 and the restoration of 60% of natural habitat in poor condition by 2040.

The objectives above must provide the basis for a **robust indicator framework** which could be based on the recommendations by the EEA. Indicators could include heat-related mortality avoided, water-security thresholds, ecosystem condition, critical-service continuity, avoided losses and indicators of equity such as tree cover in deprived neighbourhoods or winter/summer energy poverty indicators, disaggregated by location, age and gender.

Ensuring a coherent, transparent and dynamic governance framework

To ensure that the right to a habitable Europe is respected, the implementation gap must be addressed. The **simplified and integrated reporting mechanism** proposed in the framework is a positive development. It includes the obligation of carrying out a national climate risk assessment and reporting on the implementation of national climate resilience policies and measures by 2029, with the aim of adopting a five-year national strategic plan on climate resilience.

To address the risk of another bureaucratic exercise which fails to change reality on the ground, reporting must lead to **discussions on whether the level of net risk is acceptable for citizens and regions** in the EU, and related actions to increase ambition and close the implementation gap. Member states should be asked to organise citizen dialogues on that occasion, so informed citizens could weigh in on relative priorities for protection as such choice is political and not technical. To incentivise prevention and strengthen the accountability of member states, the proposed reporting system must be strengthened by:

- establishing a performance framework of similar strength to that governing mitigation. This means setting up a target (see above) and capturing distance to target in terms of hazard, exposure and vulnerability reduction;
- exempting risk reduction investment from fiscal disciplines within the macroeconomic surveillance framework of the European Union;

- creating a synchronicity with the nature restoration planning and reporting to allow for a coherent picture to emerge; and
- ensuring greater policy coherence at member state level and precluding any weakening of the environmental protection policies that contribute to risk reduction.

Adopting a common European reference scenario and methodology for climate risk assessments

Member states must produce **multi-hazard climate risk assessments based on a global warming of 3 °C by 2100 and a common methodology designed according to the best available science**. These assessments should include disaggregated analyses of exposure, vulnerability and adaptive capacity. They should identify *who* and *what* is exposed, including income, age, health, disability, gender, tenure, employment conditions, migration status, access to services and occupational exposure. Practical guidance must be provided based on best practices amongst member states, for instance Ireland's social vulnerability index. Additionally, the EC must develop guidance to help member states assess ex ante whether environmental policies, and adaptation in particular, will have a positive neutral or negative impact on the wellbeing of specific vulnerable regions. The European Scientific Advisory Board on Climate Change also recommends for the EU to consider more adverse emission pathways in which average global warming could reach 6.9 °C for stress-testing, allowing to assess robustness of policies, investments and adaptation options under higher-risk futures.

Making risk prevention the default option

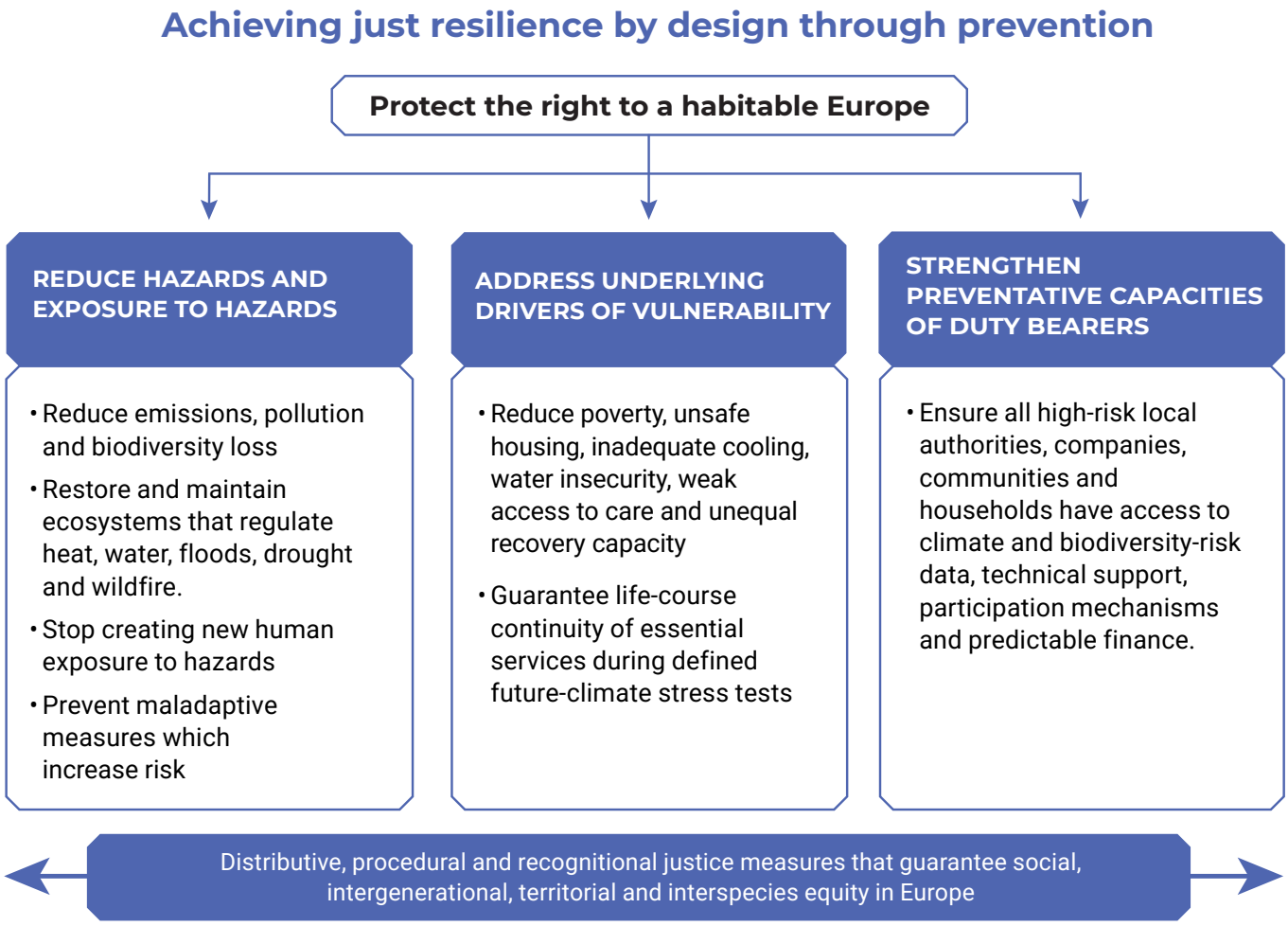
The human, economic, social and financial case for risk prevention, in the form of reduced hazard, exposure and vulnerability, is very clear. Preventive measures and climate proofing can prevent fatalities, crop losses and economic damages, as well as increase competitiveness. [57] Yet, evidence often shows a systemic tendency toward underinvestment in ex-ante prevention and preparedness relative to highly visible ex-post relief and reconstruction.[58] There is also a risk of privatising gains (with a global market for climate adaptation solutions projected to quadruple in size to €3.5 trillion by 2050) while socialising losses. This likely bias needs to be rebalanced through the principles, norms and funding guidelines outlined in Figure 4. The EU's climate resilience framework should **create the right incentive structure for public and private entities, as well as for households, to implement preventive measures**. For example, insurers should incentivise prevention through premium discounts and other incentives for household, business and community risk reduction and adaptation. Some European insurers already use "impact underwriting", that is pricing, deductibles, policy conditions or rebuilding support that rewards demonstrable reductions in physical risk. [59]

Reducing social exposure and vulnerability

The first best measures to reduce social exposure and vulnerability are pre- and redistribution measures to reduce poverty and inequality in the first place. This could take the form of a dedicated EU directive on minimum income and stronger, more accessible social-protection rights for atypical workers and self-employed people, including cross-border portability and a reinforced child guarantee.[60] Poverty reduction measures must therefore be considered as priority measures that contribute to resilience, rather than unrelated actions from different policy fields. Win-win measures include for instance:

- **climate-resilient care systems**, which address vulnerability factors (e.g., preventable and debilitating chronic diseases), respond to unmet care needs of those most vulnerable to climate impacts, such as children and older people, and of their informal or formal carers and invest in the adaptation of the care infrastructure;
- **deep, affordable home renovation** to improve thermal safety during extreme weather and

Figure 4: The role prevention in achieving a just resilience by design



reduce energy insecurity amongst low-income households and poor-quality homes;

- **urban greening** to reduce urban heat, manage intense rainfall and support health during heatwaves in heat-exposed, low-income and low-canopy neighbourhoods; and
- **low-carbon, affordable public transport** to improve mobility continuity during heat extremes and provide affordable, accessible routes for people without cars, older people and disabled residents.

Implementing resilient land planning

Well-designed environmental and land-use regulation should not be understood as red tape but rather as the most effective and least costly strategy to **avoid creating new exposure**, by aligning planning rules, building permits, environmental assessments, forestry standards and public investment decisions with forward-looking climate-risk assessments. A precautionary regulatory framework [61] is necessary and should lead to:

- **avoidance**, through no-build zones and withdrawal of development rights and land acquisition in the high-risk flood zones, coastal zones or wildfire-interface areas;
- **accommodation when avoidance is not possible**, through enforceable requirements such as minimum floor elevations, flood-resilient design, water-sensitive drainage, safe evacuation routes

and heat-resilient building standards in lower-risk areas; and

- **restoration**, through the protection and recovery of wetlands, floodplains and permeable land that can retain water and reduce downstream flood peaks.

To this effect, the EU framework should include an obligation for national planning laws, zoning rules and development permissions to use forward-looking climate scenarios backed by harmonised risk-assessment standards at the EU level.

Clarifying the notion of risk ownership

The proposed EU resilience framework requires member states to identify "policy risk ownership" in national climate risk assessments and national resilience plans for each major risk identified. However, it does not provide further definitions or guidance on the meaning and scope of risk ownership. **A fair and effective notion of risk ownership must take into account differentiated capacities and responsibilities** and ensure the following:

- The focus of risk ownership must include, but also go beyond, monetised material risk to **capture non-economic losses, including risks to life**, health, culture and way of life.
- Risk ownership must be used to **define responsibilities at the different stages of the adaptation cycle** (from risk assessment to implementation). Otherwise, there is a risk that no actor will own prevention and that the framework results in ineffective and costly maladaptation.
- **A balance must be reached between different levels of governance.** The shared risk ownership between the EU, its member states and local authorities warrants innovative forms of cooperation across governance levels for effective risk reduction, such as the Netherlands' Room for the River, the Valencian Collaboration Space and North Rhine-Westphalia's Evolving Regions, which make shared risk ownership operational by assigning complementary roles and resources to EU, national, regional, water-management and municipal actors. [62]
- Beyond public authorities, the responsibilities must be clearly delineated between public and private stakeholders. For instance, employers should proactively implement risk-reducing actions in line with EU occupational safety and health regulations and which cover all work-related safety and health risks – including those caused or intensified by heatwaves, flooding, wildfire smoke, severe weather and changing vector or disease risks. To harmonise standards and create obligations, **a new binding EU Directive on the prevention of occupational heat risks** is needed, that recognises heat as an occupational hazard and obliges employers to prevent heat-related illness, injuries and deaths. [63] Technical and financial support to small and medium enterprises should be made available to ensure effective and accelerated deployment of these solutions.

Penalising risk builders

Beyond clarifying responsibilities for risk reduction, there is a need to actively penalise risk builders in line with the polluter pays principle.[64] **Economic actors who create or materially intensify risk through emissions, pollution, hazardous development or financed fossil expansion should contribute to the costs of resilience and unavoidable loss.** This contribution could take different forms:

- Funding an EU-wide mechanism to support adaptation, maintain affordable insurance cover and fund payouts for affected communities. Alongside levies on high-impact activities such as premium air travel, the Spanish government is for instance calling for an EU Climate Adaptation Fund financed in part through a permanent tax on oil-and-gas company profits. [65]
- Insurers who do not incentivise prevention before 2030 should also be considered as risk builders and made to contribute to an EU-wide disaster mechanism.

Closing the funding and implementation gap through a just financing architecture

The outcomes of **multi-hazard climate risk assessments** must lead to the redirection of public investments where they are most needed. In line with the need to prioritise prevention, programming **guidelines on resilience** under the MFF should distinguish clearly between funds for prevention, preparedness, ecosystem restoration, social resilience and post-disaster recovery, so that emergency expenditure does not crowd out long-term adaptation investment. To promote **territorial justice**, the financing architecture should prioritise more direct access to EU funds for lower-income and highly exposed territories, complemented by technical assistance for local authorities for project preparation, procurement and monitoring. Despite acknowledging the importance of place-based adaptation and local ownership and offering practical support through the Adaptation Mission, National Adaptation Hubs, knowledge tools and investment advisory services, the proposed resilience framework falls short of guaranteeing local authorities and communities control over adaptation priorities and predictable access to resources.

Building on the experience of **Territorial Just Transition Plans** (TJTPs), the creation of Territorial Just Transition and Resilience Plans would require member states to identify affected territories and diagnose their specific social, economic and environmental transition and resilience challenges, set out development needs, and describe the actions intended to address them through 2040. Stakeholders interviewed for the TJTPs mid-term evaluation conducted by the EC particularly valued two innovations: the analysis of the local challenges and transition pathway of each territory and the participatory planning with local stakeholders and partners. [66] The design and implementation of **Territorial Just Transition and Resilience Plans** would need to be supported through adequate member state and EU technical assistance. The participation of vulnerable communities, workers, local authorities, care providers, health professionals, youth and environmental actors would be also key to ensuring procedural and recognition justice for affected people. While the urgency to act is real, top-down projects that fail to include adequate participation risk being ineffective, weakening adherence from the local population, whose collaboration is essential for success.

To deliver both mitigation, adaptation and nature restoration, the MFF should prioritise public funding for **nature-based solutions for adaptation,** such as wetland, river and floodplain restoration; agroforestry; close-to-nature forestry; soil protection; coastal restoration; and urban blue-green infrastructure. It is also urgent to undertake a fundamental reform of the Common Agricultural Policy (CAP) to remove the subsidisation of risk-building measures.

Because of the current levels of risk, increased investment is needed. The proposed resilience framework highlights that adapting the EU's infrastructure and economy to future climatic conditions is expected to require investment of around €70 billion per year. To this effect, the EU should establish a **ring-fenced adaptation window within the next MFF**, with transparent tagging that clearly disaggregates public spending for adaptation, mitigation and other environmental targets. The principle of Do no significant harm should be applied to adaptation to avoid the use of scarce public funding for maladaptation that increases risk, such as unsustainable agriculture practices. Funding should be allocated through a formula that acknowledges uneven climate exposure, social vulnerability, ecosystem importance and local delivery capacity. Building on the experience of the Climate Social Fund, special windows can be earmarked when disasters reach a certain level to provide targeted temporary direct support alongside structural investments for households particularly at risk.

Finally, **financial actors should be required to stop financing activities that increase systemic climate risk and, instead, support resilience-compatible investment** through strengthened prudential, due-diligence and transition planning rules. This could

take the form of explicit commitments to end the financing of fossil-fuel expansion, higher capital requirements for assets exposed to physical climate risks, credit limits or capital add-ons for banks heavily exposed to fossil assets and climate stress tests that feed into capital requirements. [67]

Confronting the reality of irreversible loss and damage

A rights-based resilience framework must **clarify what constitutes intolerable residual risk, what happens when adaptation limits are reached** (e.g., when combinations of extreme heat and humidity exceed physiological limits to human survival or when climatic conditions pass physical or biological thresholds necessary for species or ecosystem functioning) and what policy response is planned if those thresholds are exceeded. Reflections on this topic should include accessible grievance mechanisms, compensation and relocation safeguards where relevant, independent review of adaptation adequacy, and mandatory revision triggers when monitoring shows persistent or widening protection gaps. Without such accountability, resilience rhetoric can coexist with deepening abandonment for those places and populations most at risk.

Supporting resilience globally

It is essential to remember that the EU's resilience also depends on decisive action elsewhere, both in terms of mitigation and adaptation. This is why **the EU and its member states must increase their collective climate finance contribution**, in line with their fair share of a commitment to triple public adaptation finance for developing countries by 2030.

“

The overall objective of resilience must be to secure the right to a habitable Europe by preserving the ecological conditions that make dignified life possible for all its citizens, present and future, especially those most at risk

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5. CONCLUSION

Europe's climate future is not predetermined; much can be done to limit climate change and reduce climate risks. **The scenario of a just and resilient Europe by design should serve as a north star for policy to 2040**: a Union that reduces risks before they become disasters, protects the ecological conditions that sustain dignified life, and directs support towards people and territories with the greatest exposure and least capacity to respond. The measures included in the proposal for an EU framework for climate resilience constitute important first steps in that direction, but more precise and ambitious measures, in line with the best available science, are needed to design an effective and coherent resilience strategy.

The good news is that the EU, as well as its member states, universities and civil society, has already produced a lot of high-quality scientific knowledge on climate resilience and adaptation. It is now urgent to use that knowledge to act. While some data and climate risk assessments are still missing, the EU can already make use of extensive scientific and practical knowledge to implement win-win measures that benefit all. The EU must not be stuck in "assessment mode", endlessly evaluating climate risks and developing tools without truly building capacities, dedicating funding and implementing policies.

While planning for a 3 °C world is needed to hedge the EU's bets, especially considering current trajectories at the international level, this must not be misunderstood by policy makers as an excuse to lower the priority given to the decarbonisation of the European economy. **Member states and the EU must instead redouble their efforts to reach their 2040 targets, as well as use all diplomatic means to help bend the global emissions curve and ensure the full implementation of nature restoration targets.** The alternative, a business-as-usual pathway in which risk prevention is not prioritised, crises compound one another and resilience becomes the privilege of the few rather than a shared public good, would not only put the continent at a major competitive disadvantage but also violate our citizens' most essential right: the right to a habitable Europe.

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In 2021 the Friedrich-Ebert-Stiftung launched its competence center for Climate and Social Justice, based in Brussels. Climate and social policies must be two sides of the same European coin in the future. We need to develop climate-neutral energy systems and industries. Simultaneously, we need to safeguard and strengthen the welfare state, local participation and workers' rights.

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AI USE DISCLOSURE STATEMENT

This publication was written in accordance with the FEPS guidelines on the responsible use of AI in research and writing activities.

The authors used Perplexity and Elicit during the literature review stage to complement their identification of relevant literature and to enhance the policy mapping. The authors verified all information gathered through the AI tools. The analysis and conclusions are entirely those of the authors.

While adaptation to climate change, a shared competency, features in many policies and strategies of the EU, the primary duty bearers for adaptation are national and local authorities. So far, the operationalisation of the EU's adaptation strategy, in part due to a lack of dedicated funding, is too limited to respond to increasing needs to adapt to a rapidly changing climate in Europe. Some of the Union's policies, such as the Common Agricultural Policy, even run counter to adaptation objectives. Europe does not have a dedicated funding stream for adaptation and there is very patchy evidence of effective adaptation planning and projects at the member state level. Public authorities as a whole, including local, national and European authorities, generally perform better in terms of response rather than prevention, but the frequency and severity of recent phenomena are even outstripping the Union's capacity to respond.

Faced with this challenge, the forthcoming resilience and risk management framework proposal of the European Commission aims to step up action and effectiveness by introducing the principle of resilience by design to prevent plausible high-impact risks and losses from the outset when designing policies, investments and other measures.

Instead, this policy study proposes the principle of *just resilience by design*, which is human and rights centred and aims to secure the right to a habitable Europe that preserves the ecological conditions which make dignified life possible for all its citizens, present and future, especially those most at risk. This framework also sees the full implementation of the 2040 climate targets as well as the 2030 nature restoration plan as prerequisites, without which Europe will soon face hard adaptation limits.

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