

EUSTAFOR statement¹ on the future of EU Climate Resilience

As one of the key stakeholders in sustainable forest management, the European State Forest Association (EUSTAFOR), representing public forest managers across 28 European countries, EUSTAFOR plays a vital role in promoting sustainable, multifunctional forest management. As it was already highlighted from insights compiled in our publication “[European Forests: Tackling Climate Change²](#)”, forests are not only vulnerable to the impacts of climate change; they are also vital assets in the EU’s efforts to adapt to it. The forthcoming resilience framework must fully recognize forests as critical infrastructures and state forest managers as key actors in implementing adaptive and proactive responses on the ground.

Forests as Pillars of Climate Adaptation and Resilience

Forests are essential components of Europe’s climate resilience strategy. Beyond their well-known role in carbon sequestration, forests contribute to climate adaptation by regulating hydrological cycles, preventing soil erosion, buffering temperature extremes, and reducing the risk of floods, droughts, and heatwaves. These benefits are not abstract, they directly support the resilience of rural and urban communities, economic sectors such as agriculture, and critical infrastructure.

Yet forests themselves are increasingly exposed to a combination of climate-related threats. In recent years, the frequency and severity of disturbances such as prolonged droughts, pest outbreaks, windthrow, and wildfires have significantly increased. These stressors weaken forest ecosystems, reduce their adaptive capacity, and threaten the continuity of ecosystem services. Forest resilience, therefore, must be approached not as a passive byproduct but as an active objective requiring investment, expertise, and targeted policy support. This includes integrating forest-based adaptation into resilience strategies and EU-wide frameworks, ensuring that forests are not just protected but also actively managed dynamically to cope with future climate conditions.

Resilience through Active and Adaptive Forest Management

Strengthening forest resilience requires a long-term vision and active, professional forest management that adapts to site-specific conditions and evolving climate risks. Forest resilience strategies must include restoring degraded areas, especially after natural disturbances and creating new forest stands where ecologically appropriate, with a help of assisted migration of better-adapted species, and structurally diversifying forests to increase their resistance to future disturbances when possible.

Moreover, preventive approaches must be embedded in climate policy, including water retention measures to combat increasing aridity and fire risk, particularly in southern and central Europe. Fire management strategies should not rely solely on emergency response but should emphasize risk prevention, early detection, and the development of forest structures and infrastructure that minimize vulnerability including firefighting infrastructure equipment (access roads, water reserves), firefighting support areas (fuel breaks); all requiring active and planned forest management. This is particularly important in remote or mountainous areas where firefighting access is limited. Investment in research, innovation, and digital technologies can also enhance adaptive capacity by supporting better monitoring, modelling of future risks, and informed species selection.

¹ Any statement in this document is to be considered as a reflection of the best available professional expertise and does not necessarily reflect the political commitments of individual member organisations.

² Executive summary available here: <https://eustafor.eu/uploads/EUSTAFOR-European-Forests-Tackling-climate-change-Executive-Summary-220x152-web.pdf>



EU climate resilience policy should explicitly support these actions through coherent funding mechanisms and legislative coherence across climate, biodiversity, and forest policy domains. Instruments such as the Common Agricultural Policy, the LIFE programme, and Horizon Europe must better recognize forest-based adaptation efforts and management and facilitate the long-term investments needed to manage forests for resilience.

Learning from Practice: Demonstrating Climate Resilience on the Ground

EUSTAFOR's members are already implementing a wide range of adaptation and preparedness measures, demonstrating how forest resilience can be achieved in practice. These examples highlight the diversity of ecological contexts across Europe and the tailored strategies developed in response.

In Austria, the Austrian Federal Forests (ÖBf) have experienced a sharp increase in forest damage from storms, droughts, bark beetle infestations, and landslides, with climate-related costs reaching €41 million in 2019 alone. In response, ÖBf has adopted a dual strategy: ecological diversification through the promotion of drought-tolerant, close-to-nature mixed forests, and economic diversification beyond timber. This approach enhances both ecological resilience and economic stability in the face of ongoing climate pressures.

In France, the National Forest Office (ONF) has been integrating climate change adaptation into forest management for a long time through close cooperation with researchers and forest practitioners. Since then, some forests have been renewed thanks to government funding allowing for stands that have died or are vulnerable to be more resilient to future climate projections. Climate similarity models, long-term monitoring, and knowledge of local forest dynamics support assisted migration and species adaptation efforts. A key focus is placed on ensuring high-quality genetic resources to maintain forest vitality over time. This approach is not only scientifically grounded but also publicly supported, highlighting the value of transparent and participatory adaptation planning.

In Poland, long-standing efforts to enhance forest water retention have proven increasingly relevant considering rising temperatures and longer dry periods. For over 30 years, the Polish State Forests have implemented small-scale water retention measures to improve humidity, groundwater recharge, and ecosystem resilience. Complementary investments in fire prevention infrastructure, monitoring systems, and early detection have reduced fire-related emissions and biodiversity loss, showcasing the benefits of integrated adaptation measures.

In Scotland, Forestry and Land Scotland is using forests as tools for natural flood management, particularly in upland areas where afforestation can slow surface runoff, improve infiltration, and reduce peak flood flows. Forest design and hydrological planning are closely aligned, illustrating how forests can serve as part of broader landscape-scale resilience strategies.

Norway's mountainous terrain and growing summer droughts increase the risk of wildfires. Statskog, the Norwegian state forest agency, addresses this through education and preparedness. Initiatives include fire awareness programmes for schools, mandatory training for contractors, and equipping forestry machinery with fire suppression tools. National risk mapping using satellite data also supports effective prevention and emergency coordination.

In Spain, a reforestation project in the Gredos Mountains of Castilla y León illustrates how forest restoration can serve both adaptation and mitigation goals. Following a major fire in 2009, native species such as Scots pine and birch were replanted to build a resilient, mixed-species forest. Supported by private carbon funding, the project is restoring ecosystem functions and offers a replicable model for post-fire recovery in protected areas.

These case studies collectively demonstrate that climate resilience must consider adaptation, and it must be prioritized, resourced, and tailored to ecological and socio-economic conditions.



Recommendations for the Future EU Climate Resilience Framework

First, sustainably managed forests must be recognized as strategic and multifunctional natural infrastructure that contribute directly to societal resilience. Their ability to regulate climate impacts should be valued alongside traditional grey infrastructure. Second, policy must support active and professional forest management as the foundation for adaptation. This includes not only reforestation but also continuous structural adaptation and site-based decision-making by trained forest professionals. To conserve is to manage and we cannot achieve all the societal benefits, and ecosystem services such as climate mitigation or biodiversity without active management and a resilient socioeconomic local system.

Third, EU funding mechanisms must be reoriented to support long-term forest adaptation investments. This includes making adaptation a core aspect in rural development funding, enhancing support for nature-based solutions and active management under climate and regional policy. Moreover, in the face of mega-fires, the creation of forest roads in low-yield forests will become necessary and require EU funding. Fourth, innovation, research, and cross-sectoral collaboration must be scaled up to ensure adaptation efforts are scientifically grounded, locally relevant, and socially supported.

Finally, the resilience framework must be coherent with broader EU goals on biodiversity, carbon neutrality, bioeconomy goals and sustainable land use. Forest resilience cannot be achieved in isolation, it must be embedded in a systems approach that recognizes trade-offs, balances environmental and economic objectives that define multifunctionality, and secures the livelihoods of rural communities.

Conclusion

Climate resilience must become a guiding principle across EU forest policy. Forests are already buffering Europe from the impacts of climate change, but their ability to continue doing so is at risk. With the right support, Europe's forests can become even stronger allies in our collective adaptation effort, delivering benefits for people, biodiversity, and the climate alike. EUSTAFOR and its members stand ready to contribute expertise, experience, and capacity to ensure the future Climate Resilience Integrated Framework places forests at the heart of a resilient Europe.