

A novel approach to wildfire risk

Research for an integrated European strategy against fires

FirEUrisk is a H2020 European project that aims to improve **wildfire risk** assessment in Europe. We will develop a science-based strategy that includes **new tools for assessing the danger and the vulnerabilities** of communities and landscapes, **reducing their wildfire risks** and **adapting** them for a resilient future.

Although some fires are part of the natural functioning of different ecosystems, in many cases they constitute a threat to the environment and the population. Particularly, extreme fire seasons have severe damaging effects on **human lives and properties, infrastructure, ecosystems and ecological assets**. Wildfires occur in many landscapes around the globe, but they now also affect some ecosystems that have no resilience to fire. When factoring in the worldwide climate crisis, wildfires are expected to be more destructive and increase in frequency in the future.

At FirEUrisk, we want to address this urgent issue by developing a **coordinated approach**, taking into account not only the **biophysical conditions** associated with wildfires but also the **socio-economic and political contexts**, such as rural abandonment, land-use policies or forest related economies.

A multi-actor action Involving 38 partners

We recognise wildfire risk as a **complex process** that has to be addressed through an integrated approach. That is why we include actors from a **variety of sectors**: first responders, researchers, economists, social scientists, insurance companies and policy-makers as well as citizens and local community representatives.

The project in numbers



Partners

Research centres, authorities, companies, first responders



Years

2021-2025



**Million €
in funding**



Countries

From Europe, North America and Oceania

Find out more

 fireurisk.eu

 info@fireurisk.eu

 [@FirEUrisk](https://twitter.com/FirEUrisk)

 [@FirEUrisk](https://www.linkedin.com/company/firEURisk)

 [FirEUrisk](https://www.youtube.com/FirEUrisk)



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Taming the impact of wildfires in Europe

The FirEUrisk project combines the best practices for managing wildfire risk

Managing wildfire risk in Europe



A project to reform wildfire guidelines

At FirEUrisk, we will develop and evaluate a **novel 3-stage management strategy** that will update the current approaches to fighting wildfires. This plan of action is risk-centred and will cover every relevant aspect of this issue while also considering the **environmental context** and **socio-economic circumstances**.

1. Fire risk assessment

Analysing the resilience of communities

In this stage, we will propose new methods to evaluate **how susceptible** certain areas are to wildfires. These approaches will take into account the main pillars within this issue: **nature** and **people**. To achieve this, we will use a combination of satellites and geospatial analysis with citizen participation.

Physical danger and vulnerability:



Extreme weather conditions



Biodiversity and regeneration potential



Fuel properties



Drivers of natural ignitions.

Socio-economic factors:



Perception by people from fire-prone areas



Essential infrastructures



Human factors of fires



Urban-wildland interface



Health impacts

2. Fire risk reduction

Addressing the political and economic causes

Social and land-use conflicts are a major origin of wildfires. That is why in this stage, we will analyse the strengths and weaknesses of current **fire guidelines** and **management strategies** to offer improved alternatives to tackle the social drivers behind extreme wildfires.

Better policymaking:



Stronger fire policies



Improved land management.

Technology for fire response:



Prediction tools for responders and decision-makers



Public awareness

3. Fire risk adaptation

New conditions, new strategies

Climate crisis is changing everything we know about wildfires, so we need to adapt accordingly. We will model **future climate and demographic scenarios** to elucidate which changes should be considered for designing effective preparedness.

High-resolution simulations:



Epidemiological dynamics



Future effects of policies

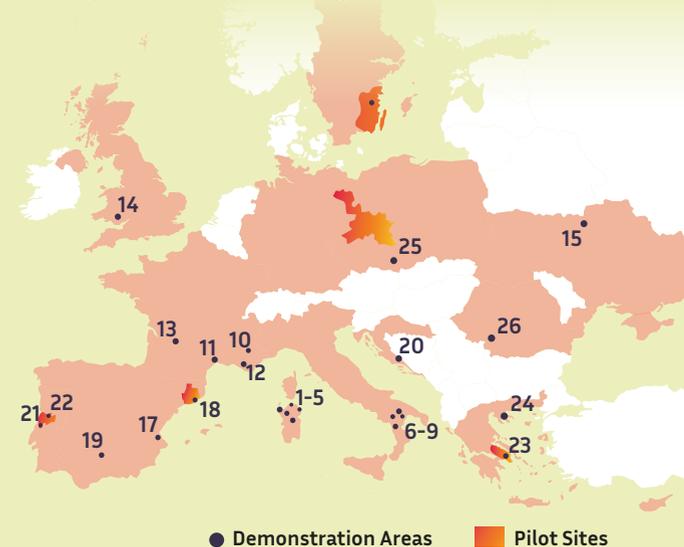


New climate and land use scenarios

4. Pilot Sites and Demonstration Areas

Testing our strategies in real-life scenarios

The wildfire management strategies generated in FirEUrisk will be tested in **Demonstration Areas** and **Pilot Sites**. Demonstration Areas will test and **validate the new methodologies** together with **local stakeholder groups**. Pilot Sites cover a variety of wildfire risk conditions in Europe and therefore will be crucial to **demonstrate the scalability of our solutions** tested locally in the Demonstration Areas along with the involvement of end-users, communities and the general public.



5. Fireurisk Observatory

An open platform for every stakeholder

We will develop a **public online platform** to boost exchange of data, codes and knowledge about wildfire risk management throughout Europe. This will **facilitate the coordination** among the different actors involved, from fire services and civil protection to policy-makers and governments.