



## Deliverable D4.1

### FIREPRIME implementation plan in SP Pilot

<b>WP - Task</b>	WP4 Task 4.1	<b>Version (1)</b>	Final
<b>Code (file name)</b>	D4.1_FIREPRIME_implementation_Plan_SP	<b>Dissemination level (2)</b>	
<b>Programmed delivery date</b>	30/04/2025	<b>Actual delivery date</b>	

<b>Document coordinator</b>	Guillem Canaleta (PCF)
<b>Contact</b>	<a href="mailto:gcanaleta@paucostafoundation.org">gcanaleta@paucostafoundation.org</a> Fundació Pau Costa. Av. Mossèn Cinto Verdaguer, 2 BXS 2a, 08552 Taradell, Catalonia Ph. +34 695 09 40 72
<b>Authors</b>	Guillem Canaleta (PCF), Ariadna Goenaga (PCF), Helena Ballart (PCF), Elsa Pastor (UPC), Martí Codina (UPC), Pascale Vacca (UPC), Simona Dossi (UPC), Maria Cifre (UOC), Israel Rodríguez (UOC)
<b>Reviewed by</b>	Eulàlia Planas (UPC)
<b>Abstract</b>	This deliverable outlines the integration, implementation, and assessment plan for the FIREPRIME Spanish pilot. It details the strategy for deploying the FIREPRIME Toolkit tailored to the local wildfire risk context and stakeholder needs. The plan includes timelines, responsible actors, and evaluation criteria to ensure effective execution and impact assessment. Provisional implementation materials developed for the Spanish pilot (in local language) are provided in annex to facilitate stakeholder engagement and knowledge transfer.

(1) Draft / Final

(2) Public / Restricted / Internal

---

*Disclaimer*

FIREPRIME is co-funded by the European Union. Views and opinions expressed in this document are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Commission. Neither the European Union nor the granting authority can be held responsible for them.

---

## Table of Contents

1.	Introduction .....	4
2.	Objectives.....	5
3.	Methodology.....	6
3.1.	Authorities and target groups.....	6
3.2.	Work process .....	6
4.	Communities’ contextualization .....	9
4.1.	La Floresta.....	9
4.2.	Sol i Aire .....	12
4.3.	SVC Chemical Industry .....	15
5.	FIREPRIME Toolkit for Sant Cugat .....	17
6.	FIREPRIME pilot activities.....	20
6.1.	The FIREPRIME risk assessment questionnaire testing with local and regional authorities .....	20
6.2.	The FIREPRIME risk assessment questionnaire testing with homeowners .....	21
6.3.	Advanced home assessment training for local volunteers.....	22
6.4.	Wildfire Preparedness Day – Risk Preparedness .....	23
6.5.	Wildfire Preparedness Day – Risk Prevention .....	26
6.6.	The FIREPRIME Challenge Race .....	27
6.7.	The Mediterranean Forest Fire and You Program.....	29
6.8.	Wildfire risk assessment guidelines for the Chemical Industry.....	30
7.	Impact evaluation and tools assessment.....	32
8.	ANNEX. Tools to be used in local language.....	34
8.1.	El joc del comportament del foc.....	34
8.2.	Joc dels productes del paisatge .....	37
8.3.	El bosc mediterrani el foc i tu .....	42
8.4.	Què fer en cas d’incendi .....	44

## 1. Introduction

FIREPRIME (2024 – 2025) is a project funded by the European Union Civil Protection Mechanism (UCPM) programme under the UCPM-2023-KAPP-PREV call. Many of the wildfires that take place in Wildland-Urban interface (WUI) areas involve extremely complex civil protection challenges. On the one hand, the population experiences threats to their lives and property, highlighting a widespread lack of wildfire risk awareness and preparedness of affected communities. On the other hand, emergency services are often immersed in scenarios where emergency management involves both wildfire suppression and protecting people and property.

It is in this context that the FIREPRIME project seeks to lay the foundations of a European program that promotes wildfire risk culture and resilience among communities, with a civil protection perspective. FIREPRIME is developed in three different regions of the EU, in close collaboration with local authorities and communities. The case study of the Mediterranean is in Barcelona region, specifically in the urbanizations of La Floresta and Sol i Aire in Sant Cugat del Vallès. The other two case studies are found in Austrian Tyrol (Central Europe) and the Gothenburg region (Northern Europe).

Through FIREPRIME, a set of risk awareness and assessment tools, named as FIREPRIME Toolkit, have been designed and adapted to the EU context, discussed and approved with both authorities and communities, through three streams: homeowner fire safety, community engagement and resilient infrastructures. Through the implementation of the FIREPRIME Toolkit, the aim is to:

- To promote wildfire resilience and adaptation of homeowners in WUI areas, community engagement and critical infrastructure resilience.
- To foster a wildfire risk culture among affected communities.
- To improve the necessary coordination and risk governance among local and regional authorities and communities.
- To design an EU adapted strategy promoting wildfire risk awareness among WUI communities.

Thus, this document focuses on the Sant Cugat pilot, outlining the planning of tools and actions to be carried out throughout 2025 in collaboration with local and regional authorities and the involved neighbourhood communities. This collaborative work has made it possible to adapt these tools and actions to the local context, allowing for an assessment of the project's sustainability and the suitability and replicability of the approach in a Mediterranean context.

## 2. Objectives

The current document has the following specific objectives:

- To identify the FIREPRIME tools that best fit with the case studies of Sol i Aire and La Floresta, considering their social, ecological, and economic diversity.
- To define how the available tools have to be adapted to the case studies.
- To provide an implementation guide of the FIREPRIME toolkit in collaboration with local and regional authorities and neighbourhood communities.
- To define the implementation calendar and the roles of all participating entities.
- To prepare the necessary content and supporting materials for implementing the pilot test in Sol i Aire and La Floresta.
- To define the process and methodology for the quantitative and qualitative assessment of the implemented tools and strategies to evaluate their suitability, sustainability, and replicability in other contexts.

## 3. Methodology

### 3.1. Authorities and target groups

In the design of the pilot implementation plan, various local and regional authorities in the fields of civil protection, environmental management, and citizen participation have been involved:

- Sant Cugat del Vallès Local council
  - Environment and sustainability service
  - Local Civil Protection service
  - Citizen participation service
- Wildfire service of the Catalan Government
  - Local Fire Station
- Civil Protection of the Catalan Government
- Local Civil Protection volunteer association
- Forest Fire Defence volunteers association
- Collserola Natural Park

The following target groups have also been involved in the pilot design phase:

- Sol i Aire self-protection group
- La Floresta neighbours association
- La Floresta Scouts
- SVC (Chemical company)

The selected stakeholders have been involved due to their commitment and interest in the topic, as well as their influence and decision-making capacity. This collaborative approach with all the stakeholders has served to promote the representation of key sectors (civil protection, environmental management, and citizens) across relevant territorial scales (local and regional).

### 3.2. Work process

The planning process for the pilot in Sant Cugat has taken an integrative approach, working jointly with both authorities and resident groups to capture the concerns and worries of the stakeholders involved in relation to wildfire risk management. This approach has allowed for the selection and adaptation of the most relevant tools and strategies for the Sant Cugat case study.

Building on this approach, the work process has consisted of three phases: preparation of the pilot, implementation, and evaluation (Figure 1).

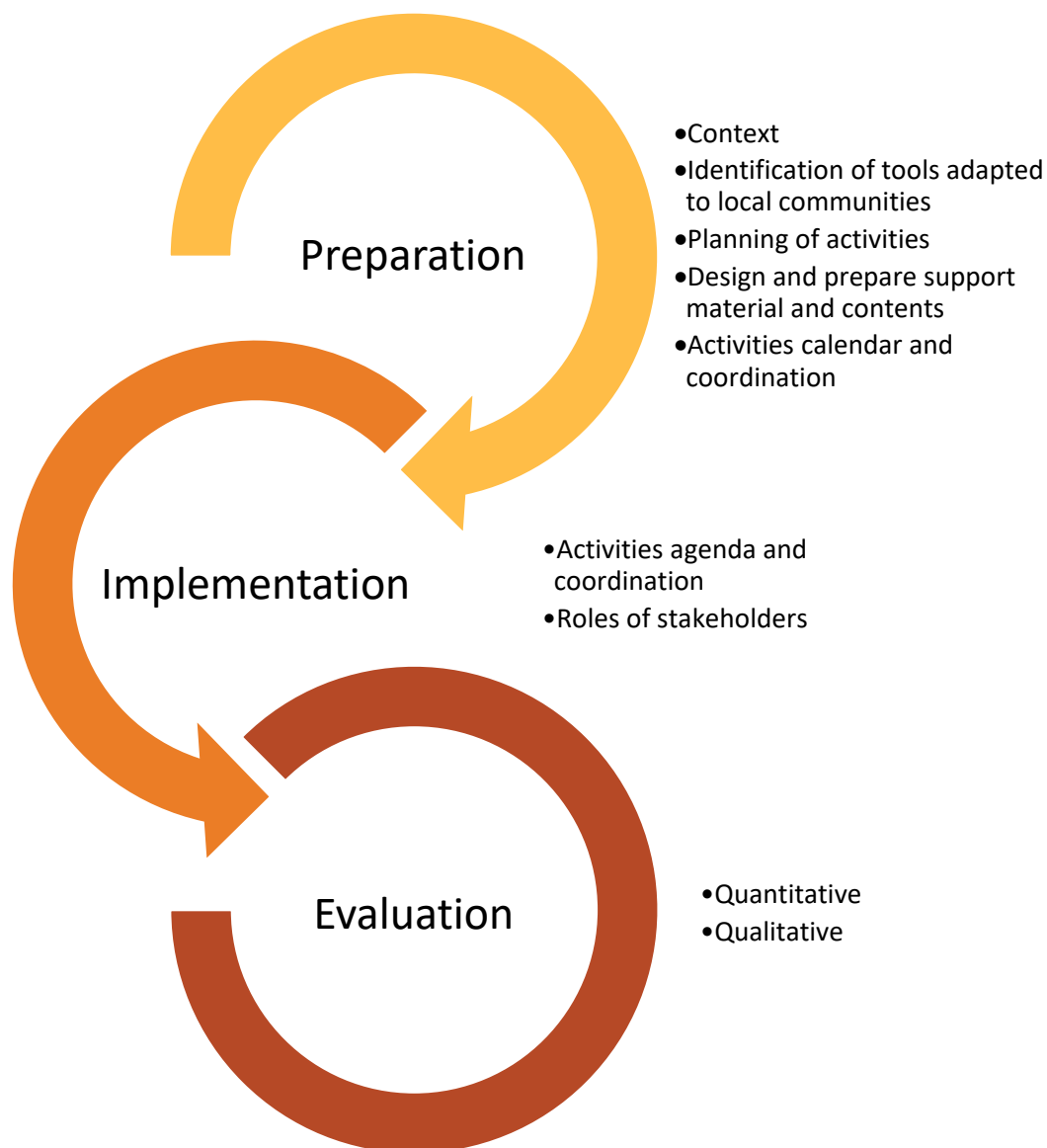


Figure 1. Pilot implementation approach.

The **preparation phase** consists of establishing the foundations for the pilot, ensuring that all tools and actions are aligned with the objectives and needs of the neighbourhoods and local stakeholders. Five steps are outlined:

- Context of the neighbourhoods: Analyse the characteristics of each neighbourhood (e.g. location, vulnerability to wildfires, community organization, available resources) to adapt the actions to their specific realities.
- Identification of tools adapted to local communities: To check the FIREPRIME toolkit in order to choose the tools that better fit with the community context.
- Activities planning: In agreement with local stakeholders, this step consist to adapt tools to local context, as well as planning the appropriate activities to deliver the tools to the community.

- Support materials and content: Prepare contents and materials such as guides, infographics, workshops, apps, or tools, among others, to facilitate the implementation of actions and provide support material.
- Activities calendar and coordination: Schedule actions considering the availability of target groups and the wildfire risk season.

The **implementation phase** involves carrying out the planned actions:

- Activities agenda: Define step by step how the activities will occur, what methodology will be used with participants, and which materials will be utilized.
- Roles of involved stakeholders: Assign tasks among different stakeholders (technicians, residents, civil protection groups, firefighters, municipality, etc.), clearly outlining who is responsible for what.

Once the actions are implemented, the **evaluation phase** begins, where an assessment is made to measure impact and detect potential improvements:

- Quantitative evaluation: Measure objective data, such as the number of participants, the number of actions carried out, outreach, and others.
- Qualitative evaluation: Gather feedback and perceptions from participants to assess the usefulness of the actions and identify strengths and weaknesses from a sustainability and replicability perspective.

## 4. Communities' contextualization

The two urban developments selected for the pilot test are La Floresta and Sol i Aire, both located in the municipality of Sant Cugat del Vallès. The choice of this municipality is based on a combination of factors that, when analysed together, create a highly favourable scenario for implementing the pilot test and ensuring its continuity beyond the project's completion.

One of the most relevant factors is the risk scenario. Sant Cugat has a significant portion of its territory within the Collserola Natural Park, with multiple urban developments located in high-wildfire risk sites. This diversity of urban areas is of great interest to the project, as it allows different risk contexts to be addressed while working with the same local and regional authorities.

Another key factor is the municipality social fabric, where residential communities are organized collectively (i.e. neighbourhood associations and self-protection groups) and by interest groups (e.g. hiking groups, sports clubs, scouts).

Finally, the previous work carried out by the city council on risk reduction, such as firebreak zones and meetings with residents, as well as its willingness to participate in the project, make Sant Cugat an ideal municipality for the pilot test.

Within Sant Cugat, two specific urban developments have been selected, representing two different neighbourhood realities in terms of population size, connectivity to the municipal centre, wildland-urban interface typology, and the stages of risk reduction work. The following section introduce both cases.

As for the FIREPRIME – Critical Infrastructure Stream, the Chemical Company SVC has been chosen as the most suitable in the Barcelona Metropolitan area to develop and test the toolkit of this stream. This is a company rated as Seveso-upper-tier, meaning that the hazards of fire, explosion and toxic release are high considering the substances and quantities present in the site. As it is located close to the wildlands in a very wildfire-prone area of Catalunya, it is a very suitable site to test FIREPRIME risk assessment tool.

Regarding the FIREPRIME – Critical Infrastructure Stream, the chemical company SVC has been selected as the most suitable site in the Barcelona Metropolitan Area to develop and test the stream's toolkit. SVC is classified as a Seveso upper-tier establishment, indicating a high risk of fire, explosion, and toxic release due to the nature and quantity of hazardous substances on site. Its location—near wildlands in a highly wildfire-prone area of Catalonia—makes it particularly well-suited for testing the FIREPRIME risk assessment tool.

### 4.1. La Floresta

La Floresta is characterized by its proximity to forested areas of the Collserola mountain range. It has a population of approximately 4,955 inhabitants and a high population density of 1,439.6 inhabitants per square kilometre (IDESCAT, 2023). While the majority of residents are aged 16 to 64, older adults make up a significant part of the community (15.3%), with a noticeable presence of women among those aged 80 and above (ibid.). La Floresta is a residential area where home-ownership predominates (73% of the total number of properties). In recent years, new residents have arrived from Europe, especially England and France, representing more than 9% of the resident population. The community is very well connected to the city centre by public transport, although people tend to heavily rely on private vehicle. Despite the sloppy terrain and

zigzag streets hinder pedestrian mobility and bicycle use, La Floresta people enjoying leisure activities visit La Floresta due to its proximity of Collserola Natural Park.

It stands out for its dynamic and active social fabric, with the presence of several civic and cultural associations that lead many of the neighbourhood activities. La Floresta Neighbourhood Council (Figure 2) serves as the coordinating body for these organizations and residents. Among them there are the Association of Property Owners and Residents of La Floresta, El Senglar Cultural, and El Mussol Association, which promote cultural and social activities to strengthen community bonds. Due to drought and the public debate surrounding the risk of wildfires, La Floresta has started organizing to work on prevention and protection issues. Active community associations organise activities and debates to participate and collaborate with the administration in reducing fire risk. It is currently in the early stages, but it benefits from a population that is already aware and engaged on these matters. There might be also conflicts and controversies over risk management, with people who are less involved, newer, or more disconnected from these dynamics.



Figure 2. La Floresta Neighbourhood council meeting (10<sup>th</sup> October 2024) where the FIREPRIME project was introduced to neighbours. Credit: Sant Cugat Local Council.

Regarding wildfire risk, the location of the community makes it essential to implement risk reduction measures. For instance, fire protection breaks have been established and are generally well-maintained (Figure 3). However, in certain areas with steep slopes, there is the possibility of extending them beyond the mandatory 25 meters (Law 5/2003, 22<sup>nd</sup> April, wildfire prevention measures in Wildland-Urban Interface) to enhance protection.



*Figure 3. Example of 25 metres fuel break between forest and urban area in La Floresta.*

Unbuild plots within the urban area are an important factor, as a low level of construction increases wildfire spread within the community. In the case of La Floresta, most of the plots are already developed, with few remaining plots available for construction. The green areas in the area are properly managed. However, the presence of a central forested area increases fire permeability and its potential to reach homes.

A notable weak point are private gardens. Many homes have densely vegetated gardens with combustible decorative elements, such as reed fences, wooden tables, and chairs. Additionally, shrubs and trees in close contact with houses are commonly observed, increasing the risk to homes in the event of a wildfire.

Regarding building materials, most structures are non-combustible, which, when combined with proper protective measures, allows for the possibility of safe sheltering during a fire.

In terms of signals, access points, dead-end streets, and hydrants are well-marked, complying with current regulations and ensuring that emergency responders can efficiently manage a wildfire event. However, accessibility and traffic flow present another critical challenge. Although La Floresta has multiple entry points, the streets are narrow and maze-like (Figure 4). During an emergency, smoke and stress could cause residents' vehicles to block roads, creating significant evacuation issues. Additionally, parked vehicles further restrict space, limiting two-way circulation, which would complicate both evacuation and the entry of firefighting teams.



*Figure 4. A street of la Floresta. The width of the streets is a critical factor, which makes it difficult to generate two-way circulation. The presence of parked vehicles further complicates the situation, as it reduces space and restricts movement, hindering both evacuation and the access of firefighting teams during an emergency.*

Finally, as a positive point, La Floresta has public spaces, such as the social and healthcare center, which could be used as gathering points and for horizontal sheltering in the event of an emergency.

All of these factors are well known by both the residents and authorities. Recently, a collaborative process has been initiated to help the neighbourhood undergo a risk adaptation and mitigation process, which should assist the population in managing the risk across all its phases: prevention, preparation, and response.

## 4.2. Sol i Aire

Sol i Aire is a residential development located within the Collserola Natural Park. Its history dates back to the 1950s, with the first construction, and it began as an extended residential area in 1967. Currently, it has over 60 homes and a population of approximately 130 inhabitants.

The development enjoys a small and cohesive community, with residents who have fought for decades to legalize and regularize their homes. Although the first buildings date back to the 1950s, the area is located on land designated as a forest park, which has led to legal and urban planning conflicts. The risk of wildfires has been, and continues to be, a key concern for many of its residents, who have organized themselves into a self-protection group, with a recently drafted protocol (2024). Sol i Aire organized itself after the major wildfires of 1994, and since then, they have been carrying out community-based risk reduction actions. They are already

well-organized, and the challenge now is to create tools that will allow them to continue improving as a group (Figure 5).



*Figure 5. Sol I Aire self-protection group meeting when FIREPRIME project was introduced (14<sup>th</sup> December 2024).*

Economically, the residents have assumed significant costs for the improvement and maintenance of their properties, as well as for the legal efforts required for the regularization of the development.

The development has fire protection strips already implemented, and they are generally in good condition. However, in some areas with steep slopes, it could be important to extend these strips beyond the mandatory 25 meters to ensure greater safety in the event of a wildfire.

Regarding the structure of the development, it is sparsely built, particularly in the plots located on steep slopes. This results in a high permeability to fire, as the lack of continuous buildings facilitates the spread of flames between the forested area and the homes. It is, therefore, a diffuse development, where the forested and urbanized areas do not have a clear boundary (Figure 6).



*Figure 6. Sol i Aire highlighting the diffuse limit between homes and forest, as well as steep slopes.*

Another critical point is the gardening. Many of them are characterized by a high density of vegetation and the presence of highly flammable decorative elements, such as reed fences, wooden tables, and chairs. Additionally, in several homes, shrubs and trees have been observed in direct contact with the facades, which increases the risk of fire spreading to the homes in the event of a wildfire.

Regarding the buildings, the vast majority are made of non-combustible materials, making them more resistant to fire. However, some structures are made of wooden elements, which can be a vulnerable point if proper protective measures are not taken (Figure 7).



*Figure 7. Example of vulnerable construction in Sol i Aire.*

In terms of signage, Sol i Aire benefits from well-marked access points, dead-end streets, and hydrants, which facilitates the identification of key elements for firefighting efforts and the safety of the population.

On the other hand, the access and traffic within the development represent some of its main weaknesses. The only existing entry and exit significantly limits the evacuation capacity in case of an emergency. Although there is an alternative sandy path, it is currently blocked by a chain, although it is understood that the self-protection group holds the key in case of need. Additionally, many streets are extremely narrow, often dead-end, and with vehicles parked along the edges, which could obstruct the passage of emergency services. In some cases, the streets have steep slopes and are made of sand, which could further complicate mobility in a risk situation.

Finally, regarding public spaces, the neighbourhood association's building presents a potential gathering and sheltering point in case of an emergency, offering a safe place for the population in critical situations.

### 4.3. SVC Chemical Industry

The company RAVAGO CHEMICALS SPAIN, S.A. (hereinafter referred to as SVC), located at Carretera C-55, km 19.5, Sant Vicenç de Castellet, is engaged in the reception, packaging, and dispatch of various chemical products. It stores chemical substances in both fixed and mobile containers. As such, a range of logistical activities related to the main operation is carried out on-site; however, no chemical synthesis processes are performed at the facility.

The main activities carried out include:

- Sampling
- Loading of tanks into tankers
- Unloading from tankers into tanks
- Packaging of substances
- Handling of loads
- Preparation of mixtures

Due to the types and quantities of substances stored at the facility, the establishment is subject to the provisions of Article 3 of Royal Decree 840/2015, of September 21, which establishes control measures for the risks inherent in major accidents involving hazardous substances—commonly known as Seveso III—at its highest threshold level.

Although the Seveso III Directive requires establishments to take into account external natural hazards—such as wildfires, floods, or earthquakes—when assessing major accident risks, it does not provide any specific guidance or methodology on how to identify, assess, or integrate these hazards into risk analyses.

SVC has always been highly concerned about the potential impact of wildfires on their facility. Although they are fully compliant with all applicable regulations, they recognize that their current level of protection against wildfire hazards is insufficient. They are aware of the need to more thoroughly assess the potential for a wildfire to trigger an accident at the plant or cause major disruptions to their operations.



*Figure 8. SVC company in Sant Vicenç de Castellet.*

## 5. FIREPRIME Toolkit for Sant Cugat

The planning logic for the tools to be implemented in the urbanizations of La Floresta and Sol i Aire in Sant Cugat has been developed collaboratively by the local partners of FIREPRIME (Universitat Politècnica de Catalunya, Universitat Oberta de Catalunya, and Fundació Pau Costa), together with local and regional authorities and the local communities described in section 3.1

The following section presents the planned tools and activities further detailed in FIREPRIME Deliverable 3.1.

Table 1. FIREPRIME tools chosen to be tested in Sant Cugat pilot.

<b>HOMEOWNER FIRE SAFETY</b>	
The FIREPRIME Smart Phone App for wildfire risk assessment at homeowner level	This smartphone app, available for both Android and iOS, is designed to help smartphone-owning residents living in the wildland-urban interface across Europe assess the hazard and vulnerability levels of their property. Using a simple, 25-question survey, users receive a quantitative risk assessment indicator along with personalized recommendations for improvement. The system is gamified, encouraging homeowners to revisit the app, log improvements they have made or plan to implement, and track their progress through an updated risk score.
The FIREPRIME Homeowner Wildfire Risk Assessment Questionnaire	The same questionnaire as the Smart Phone app, but delivered in a paper format in order to facilitate its access to people with technological restrictions.
The FIREPRIME Advanced home assessment training	Specific program designed for local volunteers who wish to gain expertise in using the risk assessment smartphone app. The training aims to give participants the necessary knowledge to lead the implementation of the app within their communities. Volunteers who complete the training will be able to assist their neighbours in answering the questionnaire and provide support in interpreting the results.
<b>COMMUNITY ENGAGEMENT</b>	
The FIREPRIME Wildfire Preparedness Day	Community event designed to raise risk awareness and planning actions to reduce wildfire risk. It brings together residents and local authorities to promote wildfire prevention, preparedness, and response strategies. In that sense, a preparedness day can host a wide range of different activities, for instance: educational workshops on home hardening and defensible space, receive hands-on training in wildfire risk assessment and emergency planning, get organized among the neighbourhood, and many others. The main goal of a Wildfire Preparedness Day is to empower communities to take proactive measures in coordination with local authorities.

<p>The FIREPRIME Community risk assessment checklist</p>	<p>This is a checklist-based tool designed to support community-level discussions on the overall wildfire risk in their area. It takes into account key factors such as the surrounding landscape, type of wildland–urban interface, vegetation cover, topographic complexity, availability of preventive infrastructure, social vulnerabilities, and other risk-amplifying elements such as access limitations or the presence of critical or vulnerable infrastructure within the neighbourhood. It is intended to be tested during a “Preparedness Day”.</p>
<p>The Self-protection Field Guide</p>	<p>Field guide specifically designed for teenagers, aiming to raise awareness and engage them in wildfire preparedness. This guide provides practical knowledge about home wildfire risk and includes an interactive exercise that allows young participants to collectively assess the preparedness level of a home. By using this guide, teenagers can better understand wildfire risk and contribute to improving safety in their communities through informed decision-making and proactive measures.</p>
<p>The Landscape Products Game</p>	<p>This activity addressed to teenagers connects local products with wildfire risk reduction. Participants explore how different land uses, such as cultivated fields and managed forests, help prevent wildfire propagation. The exercise highlights how choosing local products promotes land management practices that reduce wildfire risk.</p>
<p>The Fire Behaviour Game</p>	<p>This activity aims to help young people understand fire behavior through visual demonstrations on a small scale. Using a wooden board, different fire scenarios are presented, such as how fire moves uphill or downhill, the difference between crown fires and surface fires, and how fuel density affects fire behavior. The goal is to see and learn how fire spreads in various conditions. Additionally, a small house made of paper or cardboard demonstrates how proximity to fire impacts the intensity of the burn, illustrating the concept of defensible space and self-protection.</p>
<p>The Wildfire Readiness Game</p>	<p>In this activity, participants are presented with a wildfire scenario and must make decisions on how to respond based on official Civil Protection guidelines. They are given cards with different items or actions and must choose what they would do with each one. Afterward, a review is conducted to discuss what was done well and what could have been improved. The goal is to help participants think critically about emergency response, self-protection during wildfires and community coordination.</p>
<p>The Mediterranean Forest Fire and You Program</p>	<p>One day educational program consisting in three activities: (1) classroom presentation where topics such as fire ecology and WUI are introduced; (2) Burning of paper trees simulating two forest scenarios (managed and unmanaged forest); (3) field visit adapted to the schools surroundings (recent wildfire, WUI area, mechanical clearings, etc). The goal is to empower young</p>

	<p>people with the knowledge and skills needed to help reduce fire risks and increase resilience in their neighbourhoods.</p>
<p><b>RESILIENT INFRASTRUCTURE</b></p>	
<p>Wildfire risk assessment guidelines for the Chemical Industry</p>	<p>The wildfire assessment tool for the chemical industry, and piloted with the chemical storage plant located in the Spanish pilot site is created for general chemical industry plants and is heavily inspired by the FIRESMART guidelines for the Oil and Gas Industries, developed by FIRESMART Canada. The general assessment tool is able to be used by any chemical industry, which may be classified as Seveso or not, with specific focus on the storage of hazardous substances, which is the most important vulnerability related to the potential impact of external fire ignition.</p>

## 6. FIREPRIME pilot activities

In this section, the activities to be implemented in the pilot using the FIREPRIME Toolkit are identified and planned according to the following calendar.

Table 2. FIREPRIME Spanish pilot Implementation plan calendar.

Activity	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.
The FIREPRIME risk assessment questionnaire testing with local and regional authorities		5 <sup>th</sup>						
The FIREPRIME risk assessment questionnaire testing with homeowners		11 <sup>th</sup> 12 <sup>th</sup>						
Advanced home assessment training for local volunteers		5 <sup>th</sup>						
Wildfire Preparedness Day – Risk Preparedness			17 <sup>th</sup>					
Wildfire Preparedness Day – Risk Prevention								TBD
The FIREPRIME Challenge Race	22 <sup>nd</sup>							
The Mediterranean Forest Fire and You Program		26 <sup>th</sup>	31 <sup>st</sup>					
Wildfire risk assessment guidelines for the Chemical Industry								
TOOLS ASSESSMENT AND IMPROVEMENT								

### 6.1. The FIREPRIME risk assessment questionnaire testing with local and regional authorities

The FIREPRIME risk assessment questionnaire testing with local and regional authorities	
<b>FIREPRIME tools</b>	The FIREPRIME Smart Phone App for wildfire risk assessment at homeowner level. The FIREPRIME Homeowner Wildfire Risk Assessment Questionnaire.
<b>General objective</b>	To gather feedback on the Smart Phone App functioning and questionnaire for its adaptation before the testing phase with neighbours.
<b>Operational objectives</b>	To share the questionnaire with involved local and regional authorities to receive their feedback. To organize a 1-hour meeting with local and regional stakeholders in order discuss the App test implementation.
<b>Stakeholders</b>	<b>UPC:</b> To share the App and questionnaire. Feedback session moderation. <b>UOC:</b> Feedback session participation. <b>PCF:</b> Feedback session participation. <b>Sant Cugat Local Council:</b> To provide feedback on the App and questionnaire. To book a room for the feedback session. <b>Catalan Fire Service:</b> To provide feedback on the App and questionnaire.

	<b>Civil Protection authority:</b> To provide feedback on the App and questionnaire.
Target groups	NA
Activity description	The Smart Phone App, as well as the questionnaire in a paper format will be shared with the stakeholders. After receiving their feedback on App functioning and the questions, a 1-hour meeting will be organized with them to further discuss their feedback and the test implementation with neighbours.
Date	5 <sup>th</sup> April 2025
Time	10.00 – 11.00 CEST
Place	Sant Cugat city hall
Agenda	10.00 – Presentation of the app and questionnaire (UPC) 10.15 – Round table to comment relevant feedback (All participants) 10.45 – Test implementation (All participants)
Material/Requirements	A meeting room with a projector. Smart Phone App installed. Physical questionnaire in paper format (a copy for each attendee). Internet connection.
Risks and adaptation/mitigation measures	<b>Received feedback is complex and require significant changes to the App that would eventually delay other activities:</b> The App has been internally checked twice with a group of project partners with different profiles, which ensures that the App meets minimum requirements from both technical and social perspectives. In case of complex modifications, the testing phase with neighbours could be delayed several days or reduce the number of testing neighbours.
Sustainability after project lifespan	The result of this activity will be an almost final version of the App and questionnaire, pending testing with neighbours.
Evaluation	Number of stakeholders checking the App and questionnaire. Feedback session with stakeholders (Qualitative feedback).

## 6.2. The FIREPRIME risk assessment questionnaire testing with homeowners

<b>The FIREPRIME risk assessment questionnaire testing with homeowners</b>	
FIREPRIME tools	The FIREPRIME Smart Phone App for wildfire risk assessment at homeowner level. The FIREPRIME Homeowner Wildfire Risk Assessment Questionnaire.
General objective	To gather feedback on the Smart Phone App functioning and questionnaire from homeowners' perspective.
Operational objectives	To test the App and questionnaire (Target value 10 homeowners). To make the test with different neighbours' profiles (age groups) and home vulnerability.
Stakeholders	<b>UPC:</b> Assisting neighbours during the questionnaire and understanding results. To assess how homeowners perform alone. <b>PCF:</b> To identify neighbours for the test.

	<p><b>Local Civil Protection volunteer association:</b> To help neighbours answering the questionnaire and understanding results.</p> <p><b>Forest Fire Defence volunteers association:</b> To help neighbours answering the questionnaire and understanding results.</p> <p>Forest Fire Defence volunteers association</p>
Target groups	<b>Homeowners from La Floresta and Sol i Aire:</b> To answer the questionnaire. Some of the in App format, and some of them in paper format.
Activity description	Two days activity (1 day per neighbourhood). The FIREPRIME App and questionnaire developers will visit 10 neighbours (5 per neighbourhood) in order to assist them when answering the questionnaire, as well as to assess how they perform.
Date	11th April (La Floresta) 12th April (Sol i Aire)
Time	11th April: 15.00 to 19.00 (30 minutes per homeowner aprox.) 12th April: 10.00 to 13.00 (30 minutes per homeowner aprox.)
Place	Neighbours home. FIREPRIME team will move home to home.
Agenda	In each home, FIREPRIME team, together with the volunteers will introduce the App/questionnaire to the homeowner. After that, the homeowner will be given some minutes to answer the questions. FIREPRIME team will be there in order to assist and understand results.
Material/Requirements	The App should be previously installed. FIREPRIME team will share instructions to download the app in advanced. Printed questionnaires.
Risks and adaptation/mitigation measures	<p><b>The questionnaire takes too much time to be answered and the target value of 10 homeowners is not achieved:</b> Possibility to arrange more days for the testing. Ultimately, a minimum value of 6 homeowners of different profiles would be considered enough for the testing phase.</p> <p><b>Difficulties to install the App:</b> Set-up Instructions will be shared in advanced. In case the App is not installed, the visit could start with the App installation, which takes less than five minutes.</p>
Sustainability after project lifespan	It is a testing phase, therefore, assessing homeowners performance will help App developers to make the necessary improvements to facilitate its use. The result of the test will be the final version of the App and questionnaire, that will be available at the FIREPRIME website in local language.
Evaluation	Number of homeowners going through the App/questionnaire. Qualitative feedback received from homeowners and from on-site observations.

### 6.3. Advanced home assessment training for local volunteers

Advanced home assessment training for local volunteers	
FIREPRIME tools	<p>The FIREPRIME Advanced home assessment training</p> <p>The FIREPRIME Smart Phone App for wildfire risk assessment at homeowner level.</p> <p>The FIREPRIME Homeowner Wildfire Risk Assessment Questionnaire.</p>

General objective	To train local volunteers on FIREPRIME App and questionnaire implementation.
Operational objectives	To train at least 10 volunteers (Target value 20). To improve the Advanced home assessment method.
Stakeholders	<b>UPC:</b> Training development and instructors. <b>Sant Cugat Local Council:</b> Training facilities
Target groups	<b>Local Civil Protection volunteer association:</b> Receive the training. <b>Forest Fire Defence volunteers association:</b> Receive the training.
Activity description	A 2-hour training will be organized in order to prepare local volunteers on the usage of the FIREPRIME App and questionnaire, so they are able to support their neighbours for further App implementation after the project lifespan. The training has an introduction of the app structure and key concepts, testing of the app for two case studies and solving doubts and feedback.
Date	5th April 2025
Time	11.00 - 13.00
Place	Sant Cugat city hall
Agenda	<ul style="list-style-type: none"> <li>• Introduction of the app structure and key concepts</li> <li>• Testing of the app for two case studies</li> <li>• Solving doubts and feedback</li> </ul>
Material/Requirements	Smartphone for all volunteers. Internet connection. A room with 30 people capacity. Printed questionnaires and photos of the case studies.
Risks and adaptation/mitigation measures	<b>Low volunteer attendance:</b> Volunteers have been informed about the training with weeks in advanced. In addition, the volunteers groups are organized in forest defence and civil protection, therefore, they are already committed with the protection of the neighbourhood.
Sustainability after project lifespan	This activity is organized with the aim of ensuring the sustainability of the mobile application in the pilot area by training local volunteers. These volunteers will be responsible for assisting residents with its implementation once the project concludes. Additionally, the training content will be available on the FIREPRIME website to facilitate its replication in other regions.
Evaluation	Number of volunteers trained. Qualitative feedback for training improvement.

#### 6.4. Wildfire Preparedness Day – Risk Preparedness

Wildfire Preparedness Day - Risk Preparedness	
FIREPRIME tools	The FIREPRIME Wildfire Preparedness Day The FIREPRIME Smart Phone App for wildfire risk assessment at homeowner level. The FIREPRIME Homeowner Wildfire Risk Assessment Guideline.
General objective	To organize a FIREPRIME Wildfire Preparedness Day focused on risk preparedness

Operational objectives	<p>To gather at least 50 people from La Floresta i Sol i Aire (Target value 100).</p> <p>To engage all relevant stakeholders during the preparation of the event.</p> <p>To discuss about self-protection, confinement and evacuation procedures in case of a wildfire approaching the community.</p> <p>To foster the coordination between local civil protection authorities and community members.</p>
Stakeholders	<p><b>Sant Cugat local council:</b> Event organization and participation.</p> <ul style="list-style-type: none"> <li>• <b>Medi Ambient:</b> Fuel breaks</li> <li>• <b>Protecció Civil:</b> Civil Protection protocols</li> <li>• <b>Participació ciutadana:</b> Local community engagement.</li> <li>• <b>Policia local:</b> Civil Protection protocols</li> </ul> <p><b>Catalan Fire Service:</b> Evacuation and confinement procedures.</p> <p><b>Agrupació de Defensa Forestal de Sant Cugat:</b> The role of volunteers in risk management.</p> <p><b>Associació de Voluntaris de Protecció Civil de Sant Cugat:</b> The role of volunteers in risk management.</p> <p><b>Protecció Civil de la Generalitat:</b> Risk awareness strategies and vicil protection protocols.</p> <p><b>Grup d’Autoprotecció de Sol i Aire:</b> Community coordination.</p> <p><b>Associació de Veïns de la Floresta:</b> Community coordination.</p> <p><b>UPC:</b> FIREPRIME project coordination</p> <p><b>UOC:</b> Debate moderation</p> <p><b>PCF:</b> Debate moderation and event coordination.</p>
Target groups	<p>Same as stakeholders.</p> <p>Neighbours from other communities of Sant Cugat.</p>
Activity description	<p>A one-day Wildfire Preparedness Day will be organized together with local communities and stakeholders, focused on risk preparedness.</p> <p>The event will be structured to communicate key messages and foster dialogue between authorities and the community. It will begin with a session focused on self-protection, emphasizing individual and collective responsibility in wildfire prevention and response. Participants will learn about sheltering-in-place, including proper protective measures inside the home and when to follow authorities’ instructions. Additionally, the session will cover orderly evacuation, highlighting the importance of prior preparation, such as having an emergency kit, and ensuring coordination with emergency services.</p> <p>Following this, there will be a presentation on the actions taken in recent years to protect urban areas and strengthen community organization in Sant Cugat.</p> <p>To enhance collaboration, dedicated spaces for dialogue between authorities and citizens will be created, allowing for an open exchange of ideas and concerns.</p> <p>The event will also introduce the FIREPRIME App and the distribution of informational materials developed by Civil Protection.</p> <p>To finish the session, an informal gathering will be held, offering participants the opportunity to engage in discussions and share</p>

	opinions in a relaxed setting. This final space for dialogue, accompanied by refreshments, will encourage networking and the exchange of experiences among community members.
Date	17th May 2025
Time	10.00 to 13.00
Place	Social center of La Floresta
Agenda	<p>10.00 – 11.00. Informative part</p> <ul style="list-style-type: none"> <li>• Welcome and Preparedness Day objectives</li> <li>• Round table <ul style="list-style-type: none"> <li>○ Environmental service Sant Cugat</li> <li>○ Civil Protection Sant Cugat</li> <li>○ Fire srvice</li> <li>○ Regional Civil Protection</li> <li>○ Forest defence group</li> <li>○ Sol i Aire Self-protection group</li> <li>○ La Floesta neighbourhood association</li> <li>○ UPC – CERTEC</li> </ul> </li> </ul> <p>11.00 – 12.00. Debate and participation</p> <p>Three blocs:</p> <ul style="list-style-type: none"> <li>• Early warning and response: <ul style="list-style-type: none"> <li>○ Who and how alerts citizens in case of an emergency?</li> <li>○ How we can ensure that everyone receive the information?</li> <li>○ What can neighbours do to be more prepared?</li> </ul> </li> <li>• Confinement and evacuation <ul style="list-style-type: none"> <li>○ Prepare a confinement. Where should I stay? What should I have?</li> <li>○ How could we improve information flow to reduce uncertainty?</li> <li>○ In case of evacuation, what should I prepare? How to make a smooth evacuation.</li> </ul> </li> <li>• Self-protection of communities <ul style="list-style-type: none"> <li>○ Responsibilities of homeowners in risk reduction.</li> <li>○ Self-protection groups. How to foster collaboration among homeowners and local authorities?</li> <li>○ Previous initiatives.</li> </ul> </li> </ul> <p>12.00 – 13.00. Free time</p> <ul style="list-style-type: none"> <li>• Time slot to foster debate in small groups.</li> <li>• To make proposals</li> <li>• Civil protection risk awareness material</li> <li>• Refreshments</li> </ul>
Material/Requirements	<p>A room with a capacity of 100 people.</p> <p>Internet connection.</p> <p>Projector.</p> <p>DIN-A0 blank paper.</p> <p>Pens.</p>

Risks and adaptation/mitigation measures	<p><b>Lack of involvement from local communities and authorities:</b> Unlikely to occur, since the event has been co-organized with them. In addition, wildfire risk is a trending topic in the municipality.</p> <p><b>The debate deviates from the central issue:</b> FIREPRIME partners will actively participate having a moderation role, ensuring that the debate goes smoothly.</p> <p><b>Weather disruptions:</b> The event will be organized indoors. In case of appropriate weather, some of the activities could be hold outdoors.</p>
Sustainability after project lifespan	In terms of the event’s sustainability, a follow-up event focused on wildfire prevention will be organized after the fire season. Additionally, both communities are well-organized and actively engaged in wildfire risk management. The municipality has also shown strong interest in working on wildfire risk reduction in the coming years. Therefore, with FIREPRIME, the necessary foundations will be set to initiate a structured collaboration that is expected to continue for years under local leadership.
Evaluation	<p>Number of attendees and profile.</p> <p>A debriefing meeting will be organized with local authorities and communities.</p>

## 6.5. Wildfire Preparedness Day – Risk Prevention

<b>Wildfire Preparedness Day – Risk Prevention</b>	
FIREPRIME tools	The FIREPRIME Wildfire Preparedness Day. The FIREPRIME Community risk assessment checklist.
General objective	To organize a FIREPRIME Wildfire Preparedness Day focused on risk prevention
Operational objectives	<p>To gather at least 50 people from La Floresta i Sol i Aire (Target value 100).</p> <p>To engage all relevant stakeholders during the preparation of the event.</p> <p>To discuss risk prevention measures at community level.</p>
Stakeholders	<p><b>Sant Cugat local council</b></p> <ul style="list-style-type: none"> <li>• <b>Medi Ambient</b></li> <li>• <b>Protecció Civil</b></li> <li>• <b>Participació ciutadana</b></li> <li>• <b>Policia local</b></li> </ul> <p><b>Catalan Fire Service</b>  <b>Agrupació de Defensa Forestal de Sant Cugat</b>  <b>Associació de Voluntaris de Protecció Civil de Sant Cugat</b>  <b>Protecció Civil de la Generalitat</b>  <b>Grup d’Autoprotecció de Sol i Aire</b>  <b>Associació de Veïns de la Floresta</b>  <b>UPC</b>  <b>UOC</b>  <b>PCF</b></p>
Target groups	<p>Same as stakeholders.</p> <p>Neighbours from other communities of Sant Cugat.</p>

Activity description	The activity will be defined and prepared after the organization of the first Wildfire Preparedness Day. It will be the activity in which the official presentation of the FIREPRIME App will be integrated and the Community Risk Assessment Check list will be used.
Date	October 2025
Time	TBD
Place	TBD
Agenda	To be defined after the organization of the first Preparedness Day.
Material/Requirements	A room with a capacity of 100 people. Internet connection. Projector. Community Risk Assessment Check list
Risks and adaptation/mitigation measures	<b>Lack of involvement from local communities and authorities:</b> Unlikely to occur, since the event has been coorganized with them. In addition, wildfire risk is a trending topic in the municipality. <b>The debate deviates from the central issue:</b> FIREPRIME partners will actively participate having a moderation role, ensuring that the debate goes smoothly. <b>Weather disruptions:</b> The event will be organized indoors. In case of appropriate weather, some of the activities could be hold outdoors.
Sustainability after project lifespan	Both communities are well-organized and actively engaged in wildfire risk management. The municipality has also shown strong interest in working on wildfire risk reduction in the coming years. Therefore, with FIREPRIME, the necessary foundations will be set to initiate a structured collaboration that is expected to continue for years under local leadership.
Evaluation	Number of attendees and profile. A debriefing meeting will be organized with local authorities and communities.

## 6.6. The FIREPRIME Challenge Race

Challenge Race	
FIREPRIME tools	Self-protection field guide. Landscape products game. Fire behaviour game. Wildfire readiness game.
General objective	To organize a challenge race with youth community of La Floresta
Operational objectives	To engage 15 youth in wildfire risk management, To test four different games.
Stakeholders	<b>PCF:</b> Event organization and coordination. <b>La Floresta Scouts:</b> Event support.
Target groups	Youth participants.
Activity description	A challenge race will be organized (1 morning) together with the local scouts of la Floresta and with the participation of youth people from the neighbourhood. During the activity, participants will be organized in four equal groups. The challenges will be distributed along the neighbourhood

	<p>and the teams will have to find these challenges and successfully pass them to move. Challenges are the following:</p> <ul style="list-style-type: none"> <li>• Self-protection field guide: Field guide specifically designed for teenagers, aiming to raise awareness and engage them in wildfire preparedness. This guide provides practical knowledge about home wildfire risk and includes an interactive exercise that allows young participants to collectively assess the preparedness level of a home. By using this guide, teenagers can better understand wildfire risk and contribute to improving safety in their communities through informed decision-making and proactive measures.</li> <li>• Landscape products: This activity addressed to teenagers connects local products with wildfire risk reduction. Participants explore how different land uses, such as cultivated fields and managed forests, help prevent wildfire propagation. The exercise highlights how choosing local products promotes land management practices that reduce wildfire risk.</li> <li>• Fire behaviour game: This activity aims to help young people understand fire behaviour through visual demonstrations on a small scale. Using a wooden board, different fire scenarios are presented, such as how fire moves uphill or downhill, the difference between crown fires and surface fires, and how fuel density affects fire behavior. The goal is to see and learn how fire spreads in various conditions. Additionally, a small house made of paper or cardboard demonstrates how proximity to fire impacts the intensity of the burn, illustrating the concept of defensible space and self-protection.</li> <li>• Wildfire readiness: In this activity, participants are presented with a wildfire scenario and must make decisions on how to respond based on official Civil Protection guidelines. They are given cards with different items or actions and must choose what they would do with each one. Afterward, a review is conducted to discuss what was done well and what could have been improved. The goal is to help participants think critically about emergency response, self-protection during wildfires and community coordination.</li> </ul> <p>The goal at the end of the race is to prepare young participants to take the lead in awareness-raising activities with children.</p>
Date	22nd march 2025
Time	10.00 to 13.00
Place	La Floresta Scouts Facilities
Agenda	<p>10.00 - 10.30 – Welcome and challenge race introduction</p> <p>10.30 - 12.30 – Challenge race</p> <p>12.30 - 13.00 – Discussion on learning and next steps</p>
Material/Requirements	Maps of the neighbourhood with the location of the four activities.



	To promote community participation (activity lead by the youth group addressed to children).
Stakeholders	<b>PCF:</b> Activity organization and coordination. <b>La Floresta Scouts:</b> Activity implementation.
Target groups	Children
Activity description	The young participants from scouts group, who will have been previously trained through the challenge race and a preparation session, will take the lead in an activity for younger children. This activity will be a workshop designed by the Pau Costa Foundation, focusing on fire ecology and self-protection. In the workshop, the children will engage in an exercise using paper forests and fire scenarios, which will help them understand the importance of forest management and self-protection in the context of wildfires. The goal is for the younger children to learn from their older peers, creating a peer-to-peer learning experience that fosters both awareness and community collaboration.
Date	26th April – Preparation session for scouts 31st May – Session with children
Time	Both days from 16.30 to 19.30
Place	La Floresta scouts facilities
Agenda	16.30 - 17.00 – Welcome and activity introduction 17.00 - 19.00 – Workshop about wildfire ecology and self-protection. 19.00 - 19.30 - Debriefing
Material/Requirements	Paper, cardboard, fireproof boards, wire, lighter.
Risks and adaptation/mitigation measures	<b>Weather disruptions:</b> A plan B (scouts facilities) has been prepared. <b>The young scouts leading the activity may not have enough experience in managing a group of children:</b> FIREPRIME staff, as well as scouts responsible will support the youth in the activity implementation.
Sustainability after project lifespan	The activity itself aims to promote collaboration between young scouts and local children, making the first ones lead the activity for the second ones. The young scouts, having been trained and involved in leading the workshop, can continue to take on leadership roles in future community-based wildfire awareness activities. In addition, children will be part of a risk awareness event, equipping them with necessary knowledge the raise their interest, fostering a long-term risk awareness strategy at community level. In addition, the activity will be available on FIREPRIME website.
Evaluation	Number of participants. Debriefing with scouts leaders.

## 6.8. Wildfire risk assessment guidelines for the Chemical Industry

Wildfire risk assessment guidelines for the Chemical industry	
FIREPRIME tools	Wildfire risk assessment guidelines for the Chemical Industry.

General objective	Increase the wildfire risk awareness of infrastructure managers
Operational objectives	Identify wildfire vulnerabilities of their infrastructure sites. Provide general risk scores, and inform on possible detailed quantitative risk analysis needs.
Stakeholders	SVC company
Target groups	Safety Engineering team at SVC
Activity description	The wildfire risk assessment process at the SVC pilot site will begin with a site visit and document review to develop an initial assessment and a general overview of wildfire risk. Next, both stakeholders and the UPC team will apply the assessment independently to test its clarity and usability. The results will be compared and discussed to validate findings and identify any overlooked vulnerabilities. Finally, the tool's applicability and potential improvements will be reviewed to refine the assessment and ensure its practical value for ongoing risk management.
Date	From May 2025 to July 2025.
Time	UPC and SVC premisses
Place	
Agenda	Initial meeting Sharing the assessment and testing ease of use Evaluation of results Discussion of applicability, improvements, and need for more in-depth analysis
Material/Requirements	Guide to the Wildfire Risk Assessment – PDF with figures The Wildfire Risk Assessment – Excel file with automatic calculation from the scores entered SVC safety reports and site description
Risks and adaptation/mitigation measures	<b>Lack of involvement from SVC safety team:</b> Unlikely to occur, since the activities have been co-organized with them.
Sustainability after project lifespan	The risk assessment method is intended for periodic use, as both company conditions and wildfire hazards are dynamic. This recommendation is also outlined in the accompanying guideline.
Evaluation	Risk assessment executed and risk mitigation actions delivered

## 7. Impact evaluation and tools assessment

After the implementation of each activity, an evaluation sheet will be completed to assess the impact of the activities and to evaluate the performance of each FIREPRIME tool tested. This process will help analyse strengths and weaknesses, and to identify measures to improve further implementation.

The evaluation sheet is organized in three sections:

- SECTION 1: To describe basic information of the activity.
- SECTION 2: Assessment of the activity performance.
- SECTION 3: Assessment of the tool.

SECTION 1. GENERAL INFORMATION OF THE ACTIVITY AND TOOL	
<i>Activity name</i>	
<i>Tools used</i>	
<i>Place</i>	
<i>Date</i>	
<i>Facilitators</i>	
<i>Evaluation methodology</i>	e.g. debriefing with participants, on-site observations, questionnaire...

SECTION 2. ACTIVITY PERFORMANCE	
<b>Participants information</b>	
<i>Number of participants</i>	
<i>Profile</i>	e.g. field of expertise, age...
<b>Activity implementation</b>	
<i>Was the general objective achieved? Explain.</i>	
<i>Were the specific objectives achieved? Explain.</i>	
<b>Engagement</b>	
<i>How engaged were stakeholders before and during the activity?</i>	
<i>How engaged were the target groups during the activity?</i>	
<i>Challenges maintaining the engagement?</i>	
<b>Effectiveness</b>	
<i>Were the logistics of the activity</i>	

<i>appropriate (time, date, material...)?</i>	
<i>How successful was the activity approach? Explain.</i>	
<b>Unexpected factors</b>	
<i>Did you encounter any setback?</i>	
<i>If yes, explain adaptation/mitigation measures</i>	
<b>Sustainability/Replicability</b>	
<i>Is this an activity that can be implemented/adapted in the future with the leadership of local stakeholders? Explain.</i>	
<i>Is this an activity that can be easily replicated in other regions? What would be the main requirements to do so?</i>	
<b>Conclusions</b>	
<i>Activity strengths</i>	
<i>Activity weaknesses</i>	
<i>Potential measures to address the weaknesses</i>	

<b>SECTION 3. TOOLS ASSESSMENT</b>	
<i>Tool strengths</i>	
<i>Tools weaknesses</i>	
<i>Potential tool improvements</i>	

*\*Fill in this table for each tool used during the activity.*

## 8. ANNEX. Tools to be used in local language

This annex provides a set of draft versions of some tools from the FIREPRIME Toolkit that will be used during the implementation in Spanish pilot. The tools that have not been included are in a draft phase and the final version will not be made until after pilot testing, so they are not included in the Annex. Final versions will be available after the implementation and evaluation phase. All tools will be included in the FIREPRIME web platform in both English and local languages before the end of the project.

### 8.1. El joc del comportament del foc

#### **OBJECTIUS D'APRENTATGE**

El joc del comportament del foc serveix per a mostrar, d'una manera clara i visual, com es propaga i comporta el foc en funció de l'estructura forestal. Així doncs, els participants poden entendre la necessitat de la gestió forestal als entorns de les urbanitzacions i nuclis urbans com a mesures de protecció.

#### **OBJECTIUS DEL JOC**

Els participants han de crear, amb llumins i cotó, dos boscos diferents: un bosc gestionat i un bosc no gestionat. Generant canvis en la quantitat de cotó i llumins, així com la seva separació, han d'aconseguir que el bosc no gestionat cremi per complet i que el bosc gestionat cremi parcialment i de forma lenta.

#### **MATERIAL**

Planxa de fusta amb forats petits (diàmetre similar a un llumí), distribuïts de forma quadrícula i separats 1 centímetre entre ells.

Llumins de diferents mides (simulació dels arbres).

Cotó o serradures (simulació del sotabosc).

Taps de suro (Simulació de cases).



### **NOMBRE DE JUGADORS I DURADA**

Per tal de fomentar una bona participació de tots els participants, es recomana que el nombre de jugadors oscil·li entre el 2 i 6. L'activitat es pot dur a terme amb més participants, però de forma demostrativa, sense una participació tan activa dels jugadors.

La durada del joc és també variable. En funció del nombre d'escenaris forestals que es vulguin generar i del grau de detall que tinguin, la durada pot oscil·lar entre 15 i 30 minuts.

### **MECÀNICA DE JOC**

El joc requereix d'un responsable adult que introdueixi els conceptes clau de comportament i propagació del foc, així com per a dinamitzar l'activitat.

El dinamitzador inicia l'activitat mostrant tres situacions forestals diferents per mostrar com es comporta el foc en funció de l'espai entre llumins, la densitat i el pendent.

- Situació 1. Quantitat de llumins i separació iguals
  - Amb la taula inclinada
  - Amb la taula sense inclinar

Amb aquesta situació veuen com el foc propaga més ràpidament cara amunt que en pla o cara avall.

- Situació 2. Taula plana.
  - Llumins junts
  - Llumins separats

S'observa com els llumins junts cremen més ràpidament per la proximitat entres les flames.

- Situació 3.
  - Amb sotabosc
  - Sense sotabosc

S'observa com amb una major densitat de sotabosc (cotó), la maqueta crema més ràpidament i intensa.

Després de visualitzar aquestes tres situacions, els jugadors són els encarregats de generar dos escenaris diferents:

- Bosc no gestionat: Els jugadors han de crear una situació que acabi generant un foc ràpid i intens. Es poden col·locar taps de suro simulant cases per valorar la seva afectació.
- Bosc gestionat: Els jugadors han de crear una situació que acabi generant un foc lent i suau, on hi hagi poca afectació. Els taps de suro simulant cases han de quedar inalterats.



### **ADVERTÈNCIES**

Aquest joc inclou l'ús de llumins i foc. Per aquest motiu, és imprescindible seguir aquestes mesures de seguretat:

- El joc només es pot dur a terme sota la vigilància d'una persona adulta responsable.
- S'ha de realitzar en una àrea allunyada de zones forestals o materials inflamables. Es recomana fer-lo en un espai preparat per a la manipulació de foc, com una superfície incombustible.
- Ha d'haver-hi sempre aigua o un altre element d'extinció a prop per controlar qualsevol imprevist.
- Un cop iniciada la crema, tots els participants han de mantenir com a mínim dos metres de distància de la flama.

El foc és una eina útil i visual, però també un element perillós. Si no es poden garantir aquestes condicions, el joc no s'ha de dur a terme.

### **FONTS**

YMCA of the Rockies. 24 de maig de 2021. Fire Ecology.

<https://www.youtube.com/watch?v=QEP38nci2kE&list=LL&index=6>

Pau Costa Foundation. 2024. El bosc mediterrani, el foc i tu.

<https://www.paucostafoundation.org/ca/proyectos/mefitu/>

## 8.2. Joc dels productes del paisatge

### **OBJECTIUS D'APRENTATGE**

El joc dels productes del paisatge serveix per a mostrar com una correcta ordenació del paisatge pot aportar nombrosos beneficis pel que fa a la reducció del risc d'incendis, així com la generació de productes de proximitat.

### **OBJECTIUS DEL JOC**

Per equips, els jugadors han d'ordenar diferents targetes amb elements paisatgístics (boscos, urbanitzacions, camps agrícoles, etc) per a crear un paisatge resistent als grans incendis forestals. Posteriorment, a partir de les targetes seleccionades, els jugadors han d'identificar quins beneficis aporta cada targeta (biodiversitat, reducció del risc d'incendis, productes de proximitat, etc).

### **MATERIAL**

Fitxes de paisatge i fitxes de beneficis (Annex per imprimir).

Tauler de 3x5 fitxes.

### **NOMBRE DE JUGADORS I DURADA**

Equips d'entre 2 i 5 jugadors.

La dinàmica del joc dura uns 15 minuts.

### **MECÀNICA DE JOC**

El joc requereix d'un responsable que introdueixi els conceptes de paisatge i que dinamitzi l'activitat.

El dinamitzador inicia l'activitat presentant les cartes amb diferents aspectes del paisatge:

- Vinyes
- Bosc gestionat
- Bosc no gestionat
- Camí forestal
- Bosc amb pastura
- Bosc amb cremes prescrites
- Poble amb franja de prevenció
- Poble sense franja de prevenció
- Camp d'arbres fruiters
- Camp d'oliveres
- Camp d'hortalisses

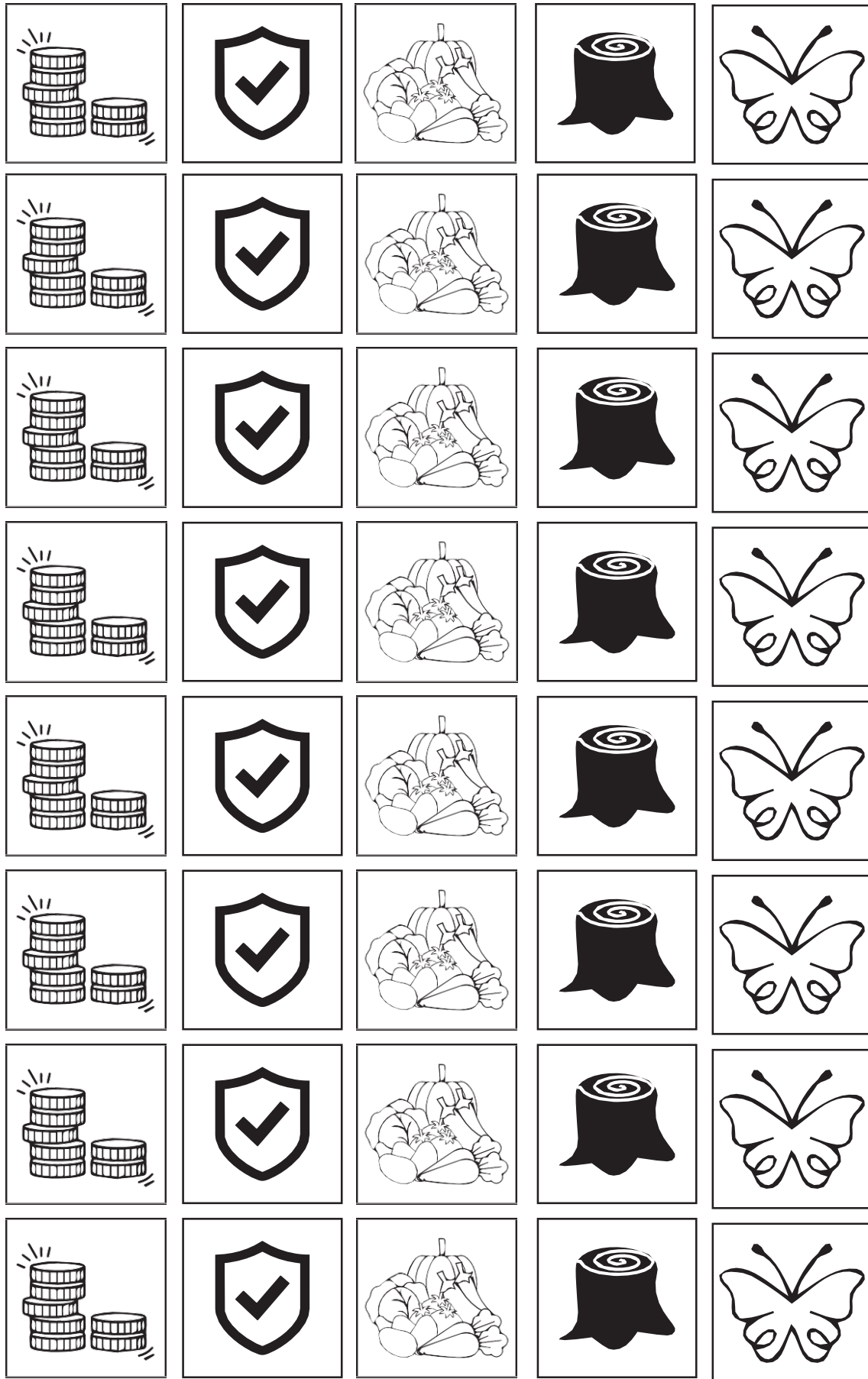
- Camp de blat



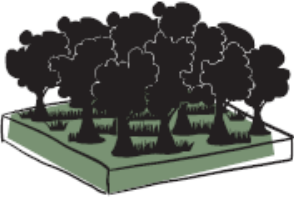
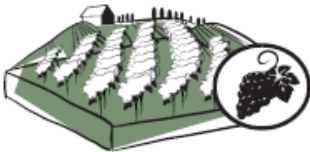




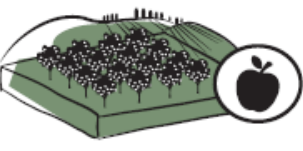


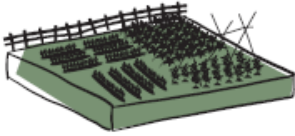
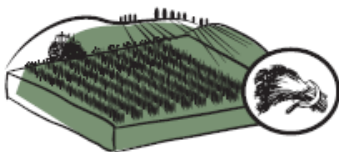


Una vegada introduïdes les cartes, els jugadors de cada equip es col·loquen en fila i el dinamitzador dona una fitxa a l'atzar al primer jugador de cada equip. Quan el primer jugador ha col·locat la fitxa al tauler de 3x5, el dinamitzador dona la carta a l'atzar al segon jugador de cada equip, que l'ha de col·locar estratègicament al costat de les fitxes ja col·locades pels companys. L'objectiu és col·locar les fitxes de manera que es formi un paisatge resistent als grans incendis forestals. Quan tot el tauler de 3x5 (per tant, 15 fitxes en total) queda omplert, s'acaba la primera part del joc i es fa un valoració del paisatge generat per cada equip.








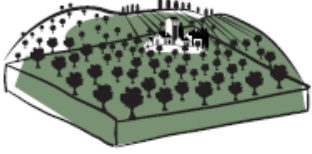
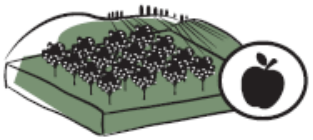






La segona part del joc consisteix en assignar els beneficis que aporta cada fitxa del paisatge, que poden ser:

- Econòmics
- Protecció d'incendis
- Alimentació
- Energia i material de construcció
- Biodiversitat





 <p><b>BOSC NO GESTIONAT</b></p>	 <p><b>BOSC NO GESTIONAT</b></p>	 <p><b>BOSC NO GESTIONAT</b></p>
 <p><b>VINYA</b></p>	 <p><b>BOSC GESTIONAT (GESTIÓ FORESTAL)</b></p>	 <p><b>BOSC AMB SILVOPASTURA</b></p>
 <p><b>BOSC AMB CREMES PRESCRITES</b></p>	 <p><b>POBLE AMB FRANJA DE PREVENCIÓ D'INCENDIS</b></p>	 <p><b>CAMP D'ARBRES FRUITERS</b></p>
 <p><b>CAMÍ AMB BOSC GESTIONAT</b></p>	 <p><b>CAMP D'OLIVERES</b></p>	 <p><b>CAMP DE CULTIU D'HORTALISSES ECOLÒGIQUES</b></p>
 <p><b>CAMP DE BLAT</b></p>	 <p><b>BOSC NO GESTIONAT</b></p>	 <p><b>BOSC NO GESTIONAT</b></p>

 <p><b>BOSC NO GESTIONAT</b></p>	 <p><b>BOSC NO GESTIONAT</b></p>	 <p><b>BOSC NO GESTIONAT</b></p>
 <p><b>VINYA</b></p>	 <p><b>BOSC GESTIONAT (GESTIÓ FORESTAL)</b></p>	 <p><b>BOSC AMB SILVOPASTURA</b></p>
 <p><b>BOSC NO GESTIONAT</b></p>	 <p><b>POBLE SENSE FRANJA DE PREVENCIÓ D'INCENDIS</b></p>	 <p><b>CAMP D'ARBRES FRUITERS</b></p>
 <p><b>BOSC NO GESTIONAT</b></p>	 <p><b>BOSC NO GESTIONAT</b></p>	 <p><b>BOSC NO GESTIONAT</b></p>
 <p><b>BOSC NO GESTIONAT</b></p>	 <p><b>BOSC NO GESTIONAT</b></p>	 <p><b>BOSC NO GESTIONAT</b></p>

### 8.3. El bosc mediterrani el foc i tu

#### **OBJECTIUS D'APRENTATGE**

L'objectiu principal de l'activitat és educar, comunicar i sensibilitzar els alumnes de primària sobre el paper del foc en els ecosistemes mediterranis i la nostra relació amb ell. Es pretén reorientar la percepció social del foc, destacant la necessitat d'aprendre a conviure-hi com un factor ecològic més, incidint en la prevenció i l'autoprotecció. Els missatges clau inclouen:

- El risc zero no existeix, cal aprendre a conviure amb el foc.
- El foc forma part del clima mediterrani i, a causa del canvi climàtic, la seva presència i intensitat augmentaran.
- És fonamental invertir en la prevenció mitjançant una gestió forestal sostenible i en l'autoprotecció.

#### **MATERIAL**

Paper i cartró reciclats per a construir arbres i altres elements paisatgístics.

Planxes metàl·liques per a sostenir la crema (Plaques alumini composite).

Cavallets de fusta per a col·locar les planxes metàl·liques.



#### **MECÀNICA DE L'ACTIVITAT**

Presentació inicial:

- Els alumnes coneixen el llop Mefitu, que els introdueix al món del foc en el context mediterrani. A través d'una presentació audiovisual, es parla del seu origen, el seu paper ecològic i com pot ser tant beneficiós com perillós, segons la gestió del territori.

Taller creatiu:

- Els infants construeixen arbres i animals amb materials reciclats. Amb això, creen dues maquetes: un bosc gestionat (amb menys densitat i vegetació baixa) i un bosc no gestionat (dens i carregat de combustible).

Simulació amb foc:

- Es presenta la història d'una bombera, un pastor i una pagesa, que expliquen com la gestió del paisatge redueix el risc d'incendi. Es fa una crema controlada sobre les maquetes per observar com el foc es comporta de manera diferent segons la gestió prèvia.
- Es poden incloure cases de paper per a simular zones urbanitzades, permetent així visualitzar l'eficàcia de les franges en la protecció de les llars.

Sortida de camp:

- Els alumnes visiten un espai natural, idealment una zona afectada per un incendi, per observar la regeneració natural i aplicar els coneixements apresos. També es fan activitats d'expressió artística per afavorir la reflexió i l'aprenentatge significatiu.

## **ADVERTÈNCIES**

Aquest joc inclou l'ús de foc. Per aquest motiu, és imprescindible seguir aquestes mesures de seguretat:

- El joc només es pot dur a terme sota la vigilància d'una persona adulta responsable.
- S'ha de realitzar en una àrea allunyada de zones forestals o materials inflamables. Es recomana fer-lo en un espai preparat per a la manipulació de foc, com una superfície incombustible.
- Ha d'haver-hi sempre aigua o un altre element d'extinció a prop per controlar qualsevol imprevist.
- Un cop iniciada la crema, tots els participants han de mantenir com a mínim tres metres de distància de la flama.

El foc és una eina útil i visual, però també un element perillós. Si no es poden garantir aquestes condicions, l'activitat no s'ha de dur a terme.

## **FONTS**

Pau Costa Foundation. 2024. El bosc mediterrani, el foc i tu.

<https://www.paucostafoundation.org/ca/proyectos/mefitu/>

Sèrie de dibuixos animats.

<https://www.youtube.com/watch?v=Hs8m32YofBc&list=PLg9vWkdCUr2klqBuLuf0QrOaApowhdbEW>

## 8.4. Què fer en cas d'incendi

### **OBJECTIUS D'APRENTATGE**

Aprendre les accions bàsiques que cal tenir en compte si un incendi forestal s'aproxima o arriba a la teva llar.

### **OBJECTIUS DEL JOC**

Es mostren diferents targetes, algunes d'elles correctes i algunes errònies, sobre què fer en cas que s'aproximi un incendi a la llar. L'objectiu és seleccionar les targetes correctes i comentar-les en grup.

### **MATERIAL**

Targetes impreses (Annex).

### **NOMBRE DE JUGADORS I DURADA**

El nombre de jugadors és indiferent, però es recomana un grup reduït de 8 persones màxim per a fomentar el debat.

Durada del joc 15 minuts.

### **MECÀNICA DE JOC**

El joc requereix d'un facilitador que introdueixi la dinàmica del joc i guïi els participants en les accions que cal fer en cas d'incendi forestal.

Es reparteixen les targetes damunt del terra o d'una taula de manera que quedin ben repartides, sense superposar-les. Els participants es col·loquen en fila a uns 20 metres de les targetes i el moderador els dos la sortida, un per un, per tal que corrin fins les targetes i cadascú en seleccioni una que cregui que inclou una acció correcta. Cada participant té 5 segons per a decidir la targeta que tria. El joc acaba quan algun dels participants considera que ja no queden targetes correctes.

Posteriorment, en grup i amb l'ajuda del facilitador, es discuteix targeta per targeta sobre la seva idoneïtat en cas d'incendi. Cada participants ha d'explicar perquè ha triat les seves targetes i parlar-ho en grup imaginant si seria efectiva en situació real d'incendi forestal.

Posteriorment cal repassar les targetes no seleccionades per a comprovar que no n'hi hagi cap de correcta que no s'hagi agafat.

Les targetes tracten els següents punts:

Correctes:

- Mantingues la calma
- Retira els objectes inflamables del voltant de la casa
- Tanca les finestres
- Tanca el pas general del gas
- Es recomanable tenir una llanterna
- Que res impedeixi el pas dels equips d'emergència
- Porta un calçat adequat (Imatge botes)
- Agafa només l'imprescindible (Imatge documentació, medicaments, documents importants...)

- No surtis de casa fins que el foc hagi passat
- No surtis de casa sense el consentiment de les autoritats o en cas d'extrema urgència.
- Posa tovalles humides sota la porta
- Amb fum respira arran de terra
- Amb fum usa un mocador moll per respirar-hi a través

Incorrectes:

- Que el pànic t'activi
- Obre les finestres
- Si no tens una llanterna es recomana portar un fanal
- Treu les coses de valor fora de casa
- Porta un calçat adequat (Imatge xancletes)
- Agafa només l'imprescindible (Imatge consola, videojocs...)
- Surt de casa a la primera senyal de foc
- Amb fum aguanta la respiració

### **FONTS**

Recomanacions d'incendis forestals de la Generalitat de Catalunya, Departament d'Interior i Seguretat Pública. Protecció Civil. <https://interior.gencat.cat/ca/incendis-forestals/prevenim/en-cas-incendi-forestal/index.html>