



ADAPTING TO A CHANGING CLIMATE IN THE MANAGEMENT OF WILDFIRES

OECD/PLACARD Conference, January 16-17 2020, Paris.

Meeting highlights

The OECD conference “*Adapting to a changing climate in the management of wildfires*” was jointly organised with PLACARD, the EU research platform for climate change adaptation and risk reduction. It gathered some 110 participants representing 20 countries, from national governments and public agencies, academia and the private sector to discuss the evolving nature of wildfire risk in the context of a changing climate and continued socio-economic development in areas at risk.

The meeting was unfortunately timely, due to the devastating bushfires that Australia has been grappling with. In reflection of this, the conference opened with an intervention from the Ambassador and Permanent Representative of Australia to the OECD, Dr. Alex Robson, who highlighted the magnitude of the challenges his country is facing. The bushfires in Australia have burnt an unprecedented 17 million hectares of land and destroyed 2,800 homes, while hundreds of thousands of people needed to be evacuated and 28 people directly lost their lives and some 1 billion animals perished.

Key insights from the conference

Climate change can be expected to worsen wildfires. Climate variability plays a major role in understanding the intensity of the extreme wildfires we are seeing today, and is expected to continue having an impact into the future. Indeed, participants underlined that a “new normal” in wildfire occurrence has not likely yet been reached. Record high temperatures, and unprecedented drought periods as well as periods of more intense precipitation that drive fuel growth, greatly influence the scale and complexity of wildfire regimes. Moreover, difficulty to predict wind patterns affect render the anticipation and mitigation of risks even more challenging.

Exposure to wildfire risk is set to grow. While wildfires are a natural occurrence and have an important role in maintaining the health of ecosystems, it is the fires’ interactions with human activities that make them devastating catastrophes. Recent events have highlighted that economic development, including housing, infrastructure development and industrial activity, continues to occur in areas prone to wildfires. Demographic and economic development in those areas are only predicted to increase in the coming years, meaning that humans and assets will be increasingly at risk. For example, between 1990 and 2010, the number of housing units next to or within forested areas grew by 60% in the United States. In other countries, such as Portugal, the opposite dynamic, namely rural land abandonment, has led to afforestation and increased fuel for fires on land that was previously dedicated to agriculture or pasture.

Wildfires can have a wide range of impacts, and more work is required to understand them thoroughly:

- From an environmental perspective, extreme wildfires cause large spatial and temporal disruptions to ecosystems and their associated services, and while some of them might be absorbed, others are potentially irreversible. A better understanding is needed of the tipping points associated with extreme wildfires.
- From a health perspective, the immediate lives lost to wildfires are the most visible impact. However, the long-term health consequences associated with poor air quality and carbon emissions still needs to be better understood to effectively address them through policies. In addition, there is a gap in the understanding of the social and psychological impacts (such as through post-traumatic stress disorders) of wildfires.
- Finally, extreme wildfires have a significant economic impact, which, beyond the direct damage to homes and commercial structures, includes significant business interruption and wider knock-on effects. A solid understanding of costs is needed to make the economic case for investing in proactive policy responses, especially when countries are in the midst of paying the high costs of response and recovery.

Insurance, in combination with other risk transfer and financing mechanisms, is an important tool to address wildfire risk. Insurance plays an important role in financially supporting the recovery of individuals, businesses and communities affected by wildfires. Large wildfire losses in recent years have led insurance companies to re-examine their approach to providing insurance for wildfire risks in some areas. This includes increasing their investment in assessing and modelling wildfire risk, developing advice on risk prevention and establishing new forms of coverage to support governments in managing the costs they face due to wildfires. The California Insurance Commissioner Ricardo Lara outlined the challenges for an insurance supervisor in mitigating the impact of higher insurance costs and reduced insurance availability on the consumers and communities affected or at risk.

Key recommendations for future work

Countries are adapting to changes in wildfire risk patterns, but they are facing a daunting task, similar to building an airplane while flying, as one conference participant put it. Several recommendations can be drawn from the discussions that future work should urgently address:

- Measures are needed to *better identify and map wildfire hazard zones*.
- The science-policy interface needs to be enhanced so that *existing scientific knowledge on wildfire regimes as well as on tools and technology to identify and monitor wildfire risks are more effectively communicated to policy makers and other stakeholders in charge of adapting wildfire management to rapidly changing conditions*.
- Emphasis in wildfire management needs to move away from fire suppression and emergency management response to also *embrace the importance of identifying and investing in effective risk assessment and prevention measures*, including critically important fuel management measures.
- Governments need to *work with communities and businesses to increase awareness and knowledge on wildfire risk as well as encourage investments in individual fire protection measures*.

- *Insurance and other risk transfer mechanisms can both limit the financial exposure to wildfire risks and encourage preventative action. Governments and insurance regulators and supervisors will need to ensure that insurers continue to be able to play this role in the context of increasing wildfire risk.*
- *International cooperation has a clear role to play, as countries are looking for effective guidance to improve their policy frameworks. Countries acknowledged that the unprecedented extreme events experienced in some countries may become more common. The conference highlighted the usefulness of organising and supporting an exchange of knowledge, lessons learned as well as of the type policies that can effectively address these urgent challenges.*

The agenda and presentations are available on the [meeting webpage](#).