# South Korea’s deadliest wildfires fuelled by climate change make blazes twice as likely



In March 2024, South Korea experienced its deadliest wildfires in history, devastating vast swaths of the country’s south-east, killing 31 people, and destroying significant historic sites, including a temple of around a thousand years old. The fires, which raged through dried-out pine forests and hilly terrains, were intensified by a combination of ultra-dry, warm, and windy conditions following a period of below-average rainfall. Local officials noted the difficulty in controlling the blazes using conventional firefighting methods due to these extreme weather factors coinciding with South Korea’s hottest recorded year.

A study conducted by World Weather Attribution (WWA), a scientific network specialising in analysing the impact of global warming on extreme weather, concluded that human-induced climate change made such fire-favouring conditions twice as likely and about 15 per cent more intense. Dr Clair Barnes, a researcher at the Centre for Environmental Policy at Imperial College London, emphasised that these unprecedented conditions exposed “the limits of even well-developed suppression systems,” underscoring the growing challenge facing traditional firefighting approaches. The WWA report advised shifting the focus toward proactive risk reduction as fires increasingly exceed control capabilities.

South Korea’s dense forest cover, with over 62 per cent of the country blanketed by forests—particularly along the eastern coast and mountainous areas—plays a significant role in wildfire dynamics. About 11 per cent of these forested regions directly border human settlements, areas shown to be particularly vulnerable to ignition, accounting for nearly 30 per cent of wildfires recorded between 2016 and 2022. The study found strong evidence linking human-driven climate change to increased fire weather conditions, as measured by the Hot-Dry-Windy Index, and elevated maximum temperatures. However, it did not find a clear connection between climate change and rainfall levels during the period around the blazes.

The fires also highlighted South Korea’s demographic challenges, notably in rural regions that are both sparsely populated and home to a large elderly population. The majority of those who lost their lives were senior citizens, raising concerns about the difficulties survivors may face in rebuilding their communities. In the aftermath of the March fires, South Korea has continued to contend with additional wildfire incidents. April saw helicopter deployments to tackle fires within the Demilitarized Zone (DMZ), the buffer separating South and North Korea, while more recent fires on Mount Hamji in Daegu city resulted in over 2,000 evacuations.

South Korea’s reliance on imported coal for approximately one-third of its electricity generation—one of the key fossil fuels contributing to global emissions—adds context to its energy and environmental challenges, as reported by the International Energy Agency.

The WWA uses attribution science to compare today’s climate conditions, influenced by about 1.3 degrees Celsius of warming since pre-industrial times, against simulated conditions from before the industrial era. This methodology provides rapid scientific assessments on the role of climate change in extreme weather events globally.

The Straits Times is reporting on the event and the scientific findings surrounding the influence of climate change on the wildfires.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://www.reuters.com/sustainability/cop/south-koreas-deadly-fires-made-twice-likely-by-climate-change-researchers-say-2025-04-30/> - This article reports that a study by the World Weather Attribution group concluded that climate change has significantly increased the likelihood and intensity of wildfires in South Korea, making such events twice as likely and about 15% more intense.
* <https://www.reuters.com/world/asia-pacific/south-koreans-mourn-historic-temple-burnt-by-wildfire-race-save-others-2025-03-27/> - This report details the destruction of the historic Gounsa temple, originally built in 681, by the largest wildfire in South Korea's history, highlighting the loss of significant cultural heritage.
* <https://www.apnews.com/article/ee28d61627d2c7de7cc1d421b65b08fd> - This article discusses the challenges faced by South Korean officials in controlling the wildfires due to extreme weather conditions, including strong winds and dry weather, which have been exacerbated by climate change.
* <https://www.the-independent.com/climate-change/news/south-korea-wildfires-death-toll-bongjeong-buddha-paintings-b2722371.html> - This piece reports on the evacuation of 15 national treasures and cultural artifacts from major temples in North Gyeongsang province to safer locations due to the wildfires, underscoring the impact on cultural heritage.
* <https://www.the-independent.com/asia/east-asia/south-korea-wildfires-andong-map-death-toll-b2721648.html> - This article highlights the demographic challenges posed by the wildfires, noting that the majority of those who lost their lives were senior citizens, raising concerns about the difficulties survivors may face in rebuilding their communities.
* <https://www.reuters.com/sustainability/sustainable-switch-tallying-cost-natural-disasters-2025-04-30/> - This report discusses the economic impact of natural disasters, including the wildfires in South Korea, and the challenges in assessing and mitigating these costs.
* <https://news.google.com/rss/articles/CBMiwAFBVV95cUxOMWNPdjN6SFoxb09nTkdSaXBNMzM4NG54Y1ZyLThnV05LVGV3Q2V4c3lqR1B3OFNya1k0MnZfaG1hR3FCYkhwN21XRVVQY1lWNkszYUFmbmNGUExqWm9jTk5oQW85empBaEVHN0Y5bjBNMnBGWWZQT3BERC1Ya3A4dndYQnJwVkZfdVNuM3lBMFJZNW5heVR4RHpQU1NQZ2ZGVll3eEpBUUl5VFZjengzdkhrOWRFd2hJZmVmTHloMy0?oc=5&hl=en-US&gl=US&ceid=US:en> - Please view link - unable to able to access data