

Press Release

INWIT TOWERS LEADING THE FIGHT AGAINST WILDFIRES NEW AI-POWERED PROJECT LAUNCHED IN PARTNERSHIP WITH LEGAMBIENTE TO PREVENT AND MONITOR FIRES IN ROME'S MONTE MARIO NATURE RESERVE AND PINETO URBAN PARK

Rome, 4 August 2025 – Nestled in the heart of the Italian capital, Rome's Monte Mario Nature Reserve and Pineto Urban Park form a centuries-old expanse of about 500 hectares, roughly the size of 700 football fields, which, every summer, faces the recurring threat of going up in smoke due to devastating wildfires. To help safeguard this vital green lung, managed by the **RomaNatura** Regional Authority, a cutting-edge initiative is being launched through a partnership between **INWIT**, Italy's top tower operator and a key player in digital infrastructure, and **Legambiente**.

6 smart cameras and 5 AI-enabled gateways have been installed on 5 INWIT telecommunications towers located near the Monte Mario Nature Reserve and the Pineto Urban Park. These devices are capable of promptly detecting smoke and spotting early signs of fire.

Mounted at the top of INWIT's towers, these advanced technologies give law enforcement and Civil Protection teams a strategic vantage point, maximising the area under surveillance. The maximum distance the cameras can cover varies according to the orographic characteristics of the site and the relative size of the fire plume. The average observation distance is 2.5 km from the monitoring point, but in certain cases, smoke plumes up to 5 km away can be detected. The equipment is also capable of operating in adverse environmental conditions and, thanks to AI, distinguishing chimney smoke from that of fires.

This project is part of a broader partnership between INWIT and Legambiente focused on wildfire monitoring and prevention and air quality monitoring. The collaboration began in 2023 with the deployment of IoT sensors and gateways to monitor air pollution in five protected natural areas across the central Apennines: the Abruzzo, Lazio and Molise National Park, the Maiella National Park, the Zompo lo Schioppo Nature Reserve, the Monte Genzana Alto Gizio Nature Reserve, and the Punta Aderci Regional Nature Reserve. Then, in July 2024, the project expanded to include wildfire prevention, with smart cameras and gateways installed in six locations: Pescasseroli (AQ), at the heart of the Abruzzo, Lazio and Molise National Park; Pettorano sul Gizio (AQ) in the Monte Genzana Alto Gizio Nature Reserve; the Lecceta di Torino di Sangro Regional Nature Reserve (CH); the Bosco Don Venanzio Nature Reserve in Pollutri (CH); and Civitella Roveto (AQ), to monitor the Longagna area. A total of **13 INWIT towers** active across these areas are now equipped with **13 gateways, 6 IoT sensors** for air quality monitoring and **15 cameras incorporating AI software** that detects early signs of wildfires.

*"Our digital infrastructure is a valuable ally in protecting biodiversity and the environment," said **Michelangelo Suigo**, External Relations, Communication & Sustainability INWIT Director. "The installation of smart cameras and AI-enabled gateways on our towers highlights the strategic value of our infrastructure. Beyond enabling multi-operator mobile connectivity, these towers also play a critical role in land and environmental monitoring, including fire prevention."*

*"After launching our wildfire prevention and monitoring initiative in Abruzzo last summer, together with INWIT we are now bringing the project to the capital," added **Giorgio Zampetti**, Executive Director of Legambiente.*

"We're focusing on two of Rome's most iconic green spaces, the Monte Mario Nature Reserve and the Pineto Urban Park, beloved by residents and tourists alike, essential and strategic for the city's biodiversity. Sadly, the threat of wildfires in urban parks and green spaces is growing every year. In July 2024, a major fire devastated part of the Monte Mario Nature Reserve, a scar still visible today and a reminder of the urgent need to invest more in wildfire prevention and in protecting urban green spaces. Technology and artificial intelligence can play a key role in this prevention effort, as shown by the ongoing collaboration with INWIT."

*"We support the introduction of innovative technologies that can make a real difference to protecting our natural heritage," said **Emiliano Manari**, Director of the RomaNatura Regional Authority. "The activities planned are fully aligned with RomaNatura's current fire prevention strategies and complement the measures planned and those already in place."*

According to the most recent report released by Legambiente, from 1 January to 18 July 2025, the Lazio region recorded 28 wildfires, burning a total of 696 hectares. Of these, 13 fires occurred in Natura 2000 sites, affecting 279.44 hectares.

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