Attentis and SAS have developed an environmental monitoring network which can help to protect endangered species like the Koala | Photo source SAS

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THE WORLD'S LARGEST REAL-TIME MONITORING NETWORK FOR ENVIRONMENTAL DISASTERS

🇦🇺 SUSTAINABILITY

The network collects and delivers vital data that has improved local agriculture, utilities and forest industries, as well as emergency responses to fires and floods

Spotted: Australian technology firm Attentis has developed a network of intelligent sensors that provide local officials and emergency response teams with data that can be used to improve responses to climate change impacts – such as floods and bushfires.

The sensors are powered by artificial intelligence (AI) and machine learning from analytics company SAS, and are capable of automatically detecting and responding to changes in their surroundings. Thus, the sensors can be used to monitor areas for potential hazards, such as fires, storm damage, and flooding. This makes them invaluable for monitoring high-risk areas and ensuring that response times are as short as possible. By using these tools, officials can reduce the impact of natural disasters on their communities.

Attentis has used the sensors to create an integrated, high-speed network. Named the Latrobe Valley Information Network (LVIN), it is the world's largest real-time environmental monitoring network. Covering 913 square miles, the LVIN collects and delivers vital data that has improved local agriculture, utilities, and forest industries – in addition to helping emergency services.

The network's array of AI-powered sensors is constantly collecting data on everything from air quality and temperature to soil moisture and humidity. This data is then transmitted to a central database, where it can be analysed and used to improve decision-making in a variety of industries. The LVIN has already had a dramatic impact on the Latrobe Valley, and Attentis is now working to expand its reach to other parts of Australia and eventually the world.

Attentis sensor networks can also play a significant role in the conservation of endangered species. For example, the koala is an iconic animal of Australia, and one that is currently under threat due to a variety of environmental factors. Historical data can play an important role in helping to protect this species, by helping researchers to understand the environmental threats that koalas have faced in the past.

Other environmental monitoring innovations spotted by Springwise include DNA analysis for biodiversity monitoring, airborne lasers for monitoring seagrass meadows, and 'smart forest' technology for managing and monitoring forests.

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Takeaway:

Severe rain in February and March of this year has caused some of the worst flooding in Australia's history. The bushfire season the past few years has also scorched millions of acres, killing people and decimating wildlife. In the wake of these disasters, there has been a surge in demand for disaster relief services. And while traditional relief efforts are important, there is also a role for technology—such as that developed by Attentis and SAS—in helping communities to recover from natural disasters. For example, drones can be used to survey damage, deliver supplies, and assess risk. Satellite data can be used to track the movement of floods and fires, and social media can be used to coordinate resources and provide information about evacuation routes. As we face the growing threat of climate change, it is clear that we need to find new ways to prepare for and respond to natural disasters. And while technology cannot completely prevent or mitigate the effects of disasters, it can play a vital role in helping us to survive and rebuild after they strike.